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ABSTRACT

This module (part of a series of 24 modules) is on developing a life skills curriculum for disabled students. The genesis of these materials is in the 10 "clusters of capabilities," outlined in the paper, "A Common Body of Practice for Teachers: The Challenge of Public Law 94-142 to Teacher Education." These clusters form the proposed core of professional knowledge needed by teachers in the future. The module is to be used by teacher educators to reexamine and enhance their current practice in preparing classroom teachers to work competently and comfortably with children who have a wide range of individual needs. The module includes objectives, scales for assessing the degree to which the identified knowledge and practices are prevalent in an existing teacher education program, and self-assessment test items. Journal articles and bibliographic references are included on teaching critical life skills to handicapped students. (JD)

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ED249208

LIFE SKILLS

FOR INDEPENDENT LIVING

PREPARED BY

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SEPTEMBER 1982

SP 025 336

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Extending the Challenge:
Working Toward a Common Body of Practice for Teachers

Concerned educators have always wrestled with issues of excellence and professional development. It is argued, in the paper "A Common Body of Practice for Teachers: The Challenge of Public Law 94-142 to Teacher Education,"* that the Education for All Handicapped Children Act of 1975 provides the necessary impetus for a concerted reexamination of teacher education. Further, it is argued that this reexamination should enhance the process of establishing a body of knowledge common to the members of the teaching profession. The paper continues, then, by outlining clusters of capabilities that may be included in the common body of knowledge. These clusters of capabilities provide the basis for the following materials.

The materials are oriented toward assessment and development. First, the various components, rating scales, self-assessments, sets of objectives, and respective rationale and knowledge bases are designed to enable teacher educators to assess current practice relative to the knowledge, skills, and commitments outlined in the aforementioned paper. The assessment is conducted not necessarily to determine the worthiness of a program or practice, but rather to reexamine current practice in order to articulate essential common elements of teacher education. In effect then, the "challenge" paper and the ensuing materials incite further discussion regarding a common body of practice for teachers.

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*Published by the American Association of Colleges for Teacher Education, Washington, DC, 1980 ($5.50).

Second and closely aligned to assessment is the developmental perspective offered by these materials. The assessment process allows the user to view current practice on a developmental continuum. Therefore, desired or more appropriate practice is readily identifiable. On another, perhaps more important dimension, the "challenge" paper and these materials focus discussion on preservice teacher education. In making decisions regarding a common body of practice it is essential that specific knowledge, skill and commitment be acquired at the preservice level. It is also essential that other additional specific knowledge, skill, and commitment be acquired as a teacher is inducted into the profession and matures with years of experience. Differentiating among these levels of professional development is paramount. These materials can be used in forums in which focused discussion will explicate better the necessary elements of preservice teacher education. This explication will then allow more productive discourse on the necessary capabilities of beginning teachers and the necessary capabilities of experienced teachers.

In brief, this work is an effort to capitalize on the creative ferment of the teaching profession in striving toward excellence and professional development. The work is to be viewed as evolutionary and formative. Contributions from our colleagues are heartily welcomed.

This paper presents one module in a series of resource materials which are designed for use by teacher educators. The genesis of these materials is in the ten "clusters of capabilities," outlined in the paper, "A Common Body of Practice for Teachers: The Challenge of Public Law 94-142 to Teacher Education," which form the proposed core of professional knowledge needed by professional teachers who will practice in the world of tomorrow. The resource materials are to be used by teacher educators to reexamine and enhance their current practice in preparing classroom teachers to work competently and comfortably with children who have a wide range of individual needs. Each module provides further elaboration of a specified "cluster of capabilities" - in this case, life skills for independent living.

Contents

Within this module are the following components:

Set of Objectives - The objectives focus on the teacher educator rather than as a student (pre-service teacher). They identify what can be expected as a result of working through the materials. The objectives which apply to teachers are identified. They are statements about skills, knowledge, and attitudes which should be part of the "common body of practice" of all teachers. Page v

Rating Scales - Scales are included by which a teacher educator could, in a cursory way, assess the degree to which the knowledge and practices identified in this module are prevalent in the existing teacher-training program. The rating scales also provide a catalyst for further thinking in each area. Page vi

Self-Assessment - Test items were developed to determine a user's working knowledge of the major concepts and principles of "life skills" education. The self-assessment may be used as a pre-assessment to determine whether one would find it worthwhile to go through the module or as a self check, after the materials have been worked through. Page vii

Rationale and Knowledge Base - The brief statement summarizes the knowledge base and empirical support for the selected topics on life skills for independent living. The more salient concepts and strategies are reviewed. Page 1

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OBJECTIVES

Upon completion of this module, you will be able to:

1. Identify the major "life skills" needed for successful adult functioning.

2. Describe instructional procedures and a curriculum that will provide students with life skills.

3. Explain the linkage of the concepts of career education and life skills education.

4. Explicate the functions and relationships of the school, family, and community in life skills education.

5. Describe procedures that can be used to assess student's life skills ability level.

REASONABLE OBJECTIVES FOR TEACHER EDUCATION

Every teacher-preparation student will:

1. Have an understanding of the critical "life skills" students will need after they leave the school system.

2. Have understanding of ways their teaching subject can be utilized to prepare students in various life skill areas.

3. Have a commitment to teaching in ways that will enhance the "life skills" of their students as an important aspect of instruction.

RATING SCALE FOR THE TEACHER PREPARATION PROGRAM

Check the statement that best describes the level of your present teacher preparation program on the topic of LIFE SKILLS EDUCATION.

_____ 1. Teacher preparation students have no introduction to LIFE SKILLS EDUCATION and how their subject matter field or teaching role can be related to its provision.

_____ 2. Teacher preparation students have been introduced minimally to LIFE SKILLS EDUCATION in perhaps one course but there has been no broad exposure in the various special fields.

_____ 3. Teacher preparation students have received a broad orientation to LIFE SKILLS EDUCATION and are able to state a rationale for such education.

_____ 4. Teacher preparation students have had good and sufficient learning experiences in their classes relative to LIFE SKILLS EDUCATION, including some simulated experience in applications.

_____ 5. Teacher interns are well prepared and able to apply the LIFE SKILLS EDUCATION approach at their practice teaching school.

SELF-ASSESSMENT

1. Define "life skills" education and its linkage to the concept of career education.

2. List what you would consider to be the major components of "life skills."

3. Describe what could be done in "life skills" education in:
   a. a typical 3rd grade class.

   b. a high school English class.

   c. operating the junior high school athletic program.

LIFE SKILLS FOR INDEPENDENT LIVING

Conventional American education generally has focused on academic topics. Students are taught skills in reading, spelling, and arithmetic to enable them to study language arts, history, social sciences, and mathematics. These areas of learning obviously are important and should be taught, but children and youth have a second set of educational needs which also must be met. They are the life skills. Usually, life skills curricula are considered to be part of what Sidney Marland, former U. S. Commissioner of Education, called "career education."

In 1981 the National School Boards Association (NSBA) surveyed 810 board members across the country to ascertain the issues with which school boards were most concerned. The respondents were asked to rank 10 topics. Which one did they rank first? Career education!

> The choice of "career education" as the number one instructional concern of school boards indicates that boards are more interested in providing students with a "back to basics" education than with courses in what might be considered "frill" areas. The prevailing opinion among students is similar: they want an education that will provide them with the knowledge and, perhaps even more significantly, the skills that will lead to well-paying jobs. The projected cutbacks in federal funding of certain education programs have sparked boards to re-evaluate and reconsider where their priorities should lie when establishing the educational goals of the school system. (NSBA, 1981, p. 11)

The remaining nine topics were ranked as follows: (2) education for handicapped students; (3) education for gifted and talented students; (4) drug education; (5) citizenship education; (6) energy education; (7) sex education; (8) global education; (9) adult education; and (10) bilingual education (NSBA, 1981).

The U. S. Chamber of Commerce (1975) reported that 24% of the students attending secondary schools in the United States drop out of the educational system. The authors argued that career education for all students can reduce the gap between unrealistic educational programs and career needs, and can provide students, especially those who otherwise might leave school early, with insight into, information on, and motivation to pursue specialized training as well as professional education.

Career education focuses on the full development of the individual and his or her ability to engage in all productive and nesessary work roles, whether as students, paid or volunteer workers, in homemaking, avocations, or retirement, and in careers. Hoyt (1980) described career education in the following terms:

- o Rooted in the four letter word "work" and in education/work relationships.
- o An effort intended to be applicable to all persons at all age levels, including all kinds of educational settings.
- o An effort that demands the joint participation of the education system and the broader community;
- o Focuses on preparing students for unpaid as well as paid work activities. (pp. 9-10)

Vocational preparation is only one aspect of career education. Career education itself is a broad concept that encompasses all the working roles and requirements one may encounter in a lifetime as an independent member of a community with employment needs. Career education is not intended to replace traditional education but, rather, to bolster it and to assure that the skills needed for functioning in the mainstream community are included.

As an aspect of career education Life Skills instruction encompasses skills necessary for 1) daily living, such as food preparation, mobility and clothing care; 2) personal-social skills, as in self-confidence, interpersonal

communication and cooperative problem solving; and 3) occupational guidance and preparation, as represented, for example, in good work habits and occupational planning. These are matters of importance to all students and they require attention by all educators. To be sure some students will attain the necessary insights and skills almost incidentally through rich life experiences. For some students, much of the necessary instruction will be provided by parents and other family members. However, in many cases, the schools must work systematically on life skills and seek collaboration in the process from families and community agencies as well. This kind of broad and systematic approach is often necessary in the case of handicapped students. Even for the main group of students the assumption that they can understand and obtain banking services on their own is unfounded; and the belief that basic math skills will generalize into intelligent buying is true for only a few.

The Need for Life Skills Preparation

The importance of giving close attention to the learning of critical life skills in the case of handicapped students is supported by the results of several studies.

1. Schalock and Harper (1978) evaluated the post-program success of 131 clients that ranged from normal to severely mentally retarded who had completed the Mid-Nebraska Adult Program. The program offered instruction in the basics of self-care, communication, pre-academics, and independent living skills. The investigators found that one major reason some clients failed was inappropriate social behavior and lack of adequate independent living skills. Nearly all the clients who did not succeed in rented homes or apartments were those who were unable to manage their money, keep their homes clean, or prepare meals.

2. In a study of mentally retarded persons living in the mainstream community, Snell (1979) concluded that the chronological age of 21 should not be regarded as the end of schooling for such persons. According to Snell,

> [The] skills for success in vocational and independent living domains are distinctly different. Teaching one domain does not preempt the other. Most high school programs ignore or "underteach" independent living skills to retarded students and it appears to be these skill omissions (budgeting, cooking, and household cleanliness) that later bring problems sufficient to necessitate costly residential dependence upon normal adults. (p. 54)

3. In a follow-up study of former student-patients of a rehabilitation hospital, Vogel (1975) examined the characteristics of those who were (a) unemployed, (b) students, and (c) employed. The unemployed group was found to be more likely to be living at home with their parents; less likely to be able to perform certain personal care tasks; less mobile; and less active socially. Among the 11 characteristics identified by Vogel as typical of mature vocational and social adjustment were daily living skills, such as having the opportunity to perform household tasks (e.g., making a bed, setting a table) and to live independently.

Opportunities for learning daily living skills are often unavailable to persons with handicaps because of the nature of their disability. A blind individual, for example, does not have the same opportunity as his or her sighted peers to learn daily living skills (e.g., food preparation) from watching a parent. Because the learning that can occur through this form of modeling is not available to the blind person, specific instruction in these skills is necessary. In addition, relatives seldom encourage a handicapped person to participate in household or personal care activities to acquire skills; they may find it easier to do things for the handicapped family member rather than to help the individual to learn the skills, or they may fail to recognize the individual's potential to learn.

Case studies and research findings also indicate that handicapped individuals need training in personal-social skills to function independently in the community. In the follow-up study by Vogel (1975), the former student-patients identified the following several experiences in the personal-social realm as important to developing social and vocational maturity: the opportunity to associate with nonhandicapped people of the same age, opportunity to learn social graces, and the chance to talk to someone about a personal problem.

The importance of learning socially appropriate behavior is illustrated in Lotte Moise's (1975) account of her experiences while raising her mentally retarded child. She stressed the importance of expecting appropriate and responsible behavior from a child who is mentally retarded just as one would from any other child. She advocated allowing a retarded youngster to take the risks that are inevitable in learning appropriate and responsible behavior.

> Of course we worry that someone might hurt her [her daughter's] feelings, cheat her when she shops, or take advantage of her trusting affection, but we also recognize that we cannot let our worry become her straightjacket, that we must not cheat her of her right to failure, as integral a component of growth as is success. (p. 30)

In a paper presented to the 98th Annual Meeting of the American Association on Mental Deficiency, Perske (1974) described the importance of helping retarded individuals to deal appropriately with specific details of social situations. He noted especially the potential dangers for such individuals if they do not understand the intricacies of interrelationships.

> A young man from an institution accepted a working contract as a pot washer in a cafeteria. He learned his working routine and carried it out well. But there were some hidden parts of the interdependency that he didn't understand. He wanted the waitresses to like him, so he put his hands on their shoulders. The result was the opposite. The boss was getting angry when he heard about it. Finally, a helping person in the form of one of the waitresses took him aside and very carefully explained what

> it did to the waitresses when he "put his hands on the cloth." This helping person further helped him to see he didn't need to talk so loudly in order to get attention now that he was out of the institution. This waitress continued to clarify the many quid pro quo actions that he needed to understand if healthy interdependent relations as a team member in this cafeteria would be fulfilled. Three years have passed. And this young man has increased his skill of interacting with others. (p. 6)
>
> John liked little children. Now, at the age of 24 he stopped to visit with little children all up and down the street. In a sense, this was understandable since he had worked for ten years as a resident helper on an infant ward, changing diapers and feeding small retarded children. It was hard for him to understand that parents didn't take kindly to having a strange man stop to show kindnesses to their children. It was John's citizen advocate who had to explain why it wasn't accepted and to explain why he should be careful where he placed his hands. Every tiny aspect of an adult strange man's relationship with children on the street had to be clarified. (p. 7)

Perske concluded that in case after case it could be shown that "hidden specifics...must be recognized and clarified by helping persons whether they be parents, vocational trainers, counselors, teachers, citizen advocates, youth advocates, fellow workers, neighbors, friends, ministers, policemen, to name only a few" (p. 7).

Students with special learning problems and needs do not have the range of community experiences that their nonhandicapped peers have; for example, they seldom hold part-time jobs and are often excluded from many common social interactions. Others are less able than their peers to generalize previous learning to new situations. Some are so uncomfortable in approaching new social situations and/or are so concerned with demonstrating what they feel may be seen as incompetence that they go to great lengths to avoid unfamiliar activities.

Toward a Life Skills Curriculum Approach

In recent years, a considerable number of life skills curriculums have been developed for handicapped and other students with special learning

problems. A partial list is presented in Appendix A. One large-scale attempt to identify the critical life skills (or competencies) that are needed by such students involved 12 school districts and over 350 educators across the country. The project, which my associates and I conducted at the University of Missouri-Columbia, culminated in a curriculum guide, Life-Centered Career Education: A Competency-Based Approach (Brolin, 1978), and a Trainer's Guide for Life Centered Career Education (Brolin, McKay, & West, 1978). The extensive study of critical life skills resulted in the conceptualization of 22 major competencies which were categorized under three domains as follows:

Daily Living Skills

1. Finances
2. Home Maintenance
3. Personal Needs
4. Family Living
5. Food Preparation
6. Clothing Care
7. Civic Responsibilities
8. Mobility
9. Recreation and Leisure

Personal-Social Skills

10. Self-Awareness
11. Self-Confidence
12. Social Behavior
13. Interpersonal Skills
14. Independence

15. Problem-Solving

16. Communication

Occupational Guidance and Preparation

17. Occupational Awareness

18. Occupational Planning

19. Work Habits and Behaviors

20. Physical-Manual Skills

21. Occupational Skills

22. Job Seeking and Maintenance

These competencies and their 102 subcompetencies (see Appendix B, "Life-Centered Career Education for Exceptional Children" by Donn E. Brolin, Fig. 1) represent what the project's research, practitioner experience, and expert opinion deemed to be essential for successful adult functioning. The competencies were subjected to rigorous review by hundreds of school personnel throughout the country to arrive at the final consensus on critical life skills.

School, Family, and Community Relations

A successful life skills curriculum requires dedicated and informed work by teachers and counselors and collateral help from family and community agencies. All parties are directed to a common cause: helping students to learn the major life skills. If they learn these skills, students have a much improved opportunity to become contributors to the community rather than a drain on it. But, the responsibility does not rest only with schools; it also rests with students' families and communities.

Family Involvement

Educators have long recognized the importance of more family involvement in children's education. The question has been how it could be done

meaningfully. The life skills curriculum provides such a vehicle. It helps to make explicit an important set of objectives on which teachers and parents can work cooperatively in behalf of each child. The family can contribute to the achievement of virtually every objective by providing hands-on experiences, positive reinforcement for achievements, community experiences, participation in family decision making, specific job tasks around the house, an atmosphere that encourages the development of independence, opportunities to develop positive work habits and values, meaningful leisure and recreational pursuits, and other worthwhile opportunities.

Educators cannot afford to work apart from parents. Public Law 94-142 requires that an Individualized Education Program (IEP) be written for each eligible pupil and that parents participate in developing the educational objectives in the IEP for their child. The IEP can be seen as another tool for encouraging parental interest in their children's education. They can be included in and committed to responsibilities designated on the IEP form. Some suggestions for involving parents and other members of the family in educational objectives are (a) to initiate an active information program; (b) to devise a brochure or handbook on classroom activities that can be replicated in the home; (c) to present "career/life skills workshops" for parents; and (d) to conduct field trips for parents to training sites, placement facilities, and classroom activities related to critical life skills development. Jordan (1976) posed 10 commandments (paraphrased here) for educators who work with parents:

1. Be honest in your appraisal of the situation and explain it without unnecessary delay.
2. Deal with both parents, since they are a natural unit and need shared understandings.

3. Be precise, but do not be unnecessarily technical in your explanation.
4. Point out who must be responsible ultimately.
5. Help the parents grasp the issues.
6. Keep in mind that other agencies often can be of assistance.
7. Avoid precipitating ego-defensive behavior in the parents.
8. Do not expect too much too soon.
9. Allow parents their quota of concern and uncertainty.
10. Try to crystallize positive attitudes at the outset by using good counseling techniques.

An issue of Missouri Schools (April 1981) suggested many ways that parents and other family members can assist educators to foster writing skills:

- o Have a chalkboard available for the child.
- o Provide a picture dictionary and later a thesaurus.
- o Encourage the child to write part of or an entire letter.
- o Offer encouragement about his/her writing.
- o Allow the child to use "inventive spelling"--to spell words the way she/he thinks they sound.
- o Read good literature, prose, and poetry to him/her.
- o Share the various kinds of writing that they do.
- o Let the child take dictation.
- o Help the child revise his written work.
- o Encourage keeping a diary or journal.
- o Encourage extensive reading.
- o Find a pen pal.

To foster arithmetic skills:

- o Let the child help with household chores, discussing how many plates, forks, spoons, napkins, etc., will be needed for members of the family.
- o Provide measuring tools (tape measures, rulers, measuring cups, bathroom scales, etc.) and let the child measure and weigh objects, estimate lengths and weights, etc.
- o Let the child be a "cook's assistant" and help measure liquid and dry ingredients for cooking.
- o Give the child a weekly allowance and a savings account.
- o Buy or make games that give practice with numbers and patterns.
- o Using the grocery store, play "shopper" and "checker," helping the child calculate the cost of purchases and making change.
- o Encourage the child to solve quantitative problems.

To foster reading skills:

- o Read to the child to add new words to his/her vocabulary.
- o Let the child use a tape recorder if you have one to hear himself/herself on tape.
- o Have the child read for a few minutes every day.
- o Have a family reading time.
- o Buy or make games that give practice in reading.
- o Have reading materials around the home.
- o Take the child to the public library for a library card and to learn how to find and check out books.
- o Talk with the child about stories and books she/he has read or the family has read together.
- o Help children start a library of their own.

o Encourage the child to write about things he reads and to write stories of his own.

Some suggestions for family activities to develop other critical life skills that the student will need for adult functioning follow (Brolin & Kokaska, 1979):

1. Emphasize the development of coordination, dexterity, balance, and strength by providing physical exercises or activities (sports, crafts, balance boards, chores around the house).
2. If possible, provide a home workshop so construction activities can be learned by using tools, such as the hammer, saw, ruler, and drill press.
3. Assign specific duties to the individual. The duties should be completed to specifications regarding quality and time frame. The assignment of duties in the home also provides an opportunity to assist the child in planning such items as following a routine, maintaining a schedule, and returning tools or utensils to specified locations.
4. Identify jobs performed by various workers in the community, visit job sites, and discuss them in detail in the family. These discussions assist the individual in developing and expressing attitudes and opinions about work and specific roles. They also help to build work values, interests, and long-term aspirations.
5. Provide a variety of family experiences, such as camping trips, participation in sport events, travel, and church activities, to build leisure, recreation, and social skills.

6. Insist that the individual learn gradually to make his/her own life decisions, including careful study of alternatives, and to understand the consequences. This process of problem solving and decision making is essential to the development of the individual's independent status in the family and community.
7. Help to create a sense of psychological security by providing positive reinforcement for successful work and the opportunity to participate in family decision making. Once again, the family should concentrate on building a positive self-concept and confidence in his/her abilities.
8. Work closely with school personnel when called upon to cooperate on projects. For example, teachers often use classroom activities through which students learn about their parent's occupations. The activities may include child-parent interviews and field trips to the parents' work locations.
9. Help develop community experiences in cooperation with school personnel, for example, supervising field trips, offering to be a guest speaker, and providing work experience.
10. Become involved in school advisory committees on curriculum, development of resources, and other educational matters.

The suggested involvement of the family gives the student a greater array of reinforced experiences that cannot be provided strictly within an isolated school curriculum. Reports between home and school are important, of course, so that parent and teacher can appraise and reinforce each other's work in every possible way. An actual cooperative effort between the school and family is important for all children, but it may be critical for many handicapped children.

Community Resources

Another key educational environment in which the student acquires critical life skills is that of the community. Examples of community resources are banks, credit unions, insurance companies, utility companies, department stores, restaurants, and grocery stores. All of them can give the student information and experiences in learning daily living skills, both through informal experiences and formal work experiences. Other settings may be used for volunteer, recreational, and social experiences. Brolin and Kokaska (1979) suggested six particularly important avenues through which educators can involve members of the business and industrial community in life-skills-development efforts:

1. Invite them to serve on a Community Advisory Committee for the Career Development program. The committee can review program components, such as instructional materials, facilities, equipment, and cooperative training agreements, and identify community contributions and resources.
2. Request participation from the local or state Committee on Employment of the Handicapped. This committee provides educators with referrals to members of government agencies, labor, veterans' organizations, fraternal, and religious groups as well as business and industry.
3. Make presentations to civic organizations. This activity provides educators with the opportunity to present the benefits of their training and placement program and to pursue possible leads for further involvement with business and industry.

4. Issue program publications. Publications provide a ready reference when the educator is unavailable. Suggested are an attractive brochure, "hard data" reports, and news releases containing feature stories and accounts of students' unique accomplishments.
5. Advertise in business publications. Articles about student programs and accomplishments often are of great interest and value in program enhancement.
6. Conduct job fairs, workshops, and institutes. The job fair offers a central location at which representatives from business and industry can interview applicants. Workshops and institutes are good for taking the mystery out of the educational program and student needs.

One example of the extensive use of community resources is Experience-Based Career Education (EBCE). The EBCE approach is based on the willingness of the business and industry leaders to volunteer their resources for educating children. First, however, they must be acquainted with the educational needs of students. Orientation meetings are conducted to secure volunteers who will open their doors to the analysis and development of their resource. Experienced analysts study each business in depth and a learning-site guide (LSG) is developed to provide the teacher-coordinator the essentials of the learning structure when a student is placed at the site. Each student spends 2-3 afternoons at each site for 8-9 weeks, then moves on to another site.

The success of any community involvement program depends upon the formation of a local coordinating or advisory committee. This committee should be made up of businessmen, parents, students, and educators, but

the latter should be in the minority. The advisory committee can be a sounding board for the project, the base for soliciting other businesses and resources to aid in the program, a resource for parents who are seeking information and a help to schools in making decisions on policies and procedures (Brolin & Kokaska, 1979).

Infusing Life Skills

A curriculum-development concept that is the cornerstone to effective life skills education is called "infusion." Basically, infusion refers to the process of integrating instructional goals and procedures into all the facets of an existing curriculum. As a strategy, infusion contrasts with the development of a special course on life skills. The intent of infusion is to involve all teachers in life skills education and to make life skills an aspect of the curriculum in every subject. Infusion does not require that current courses be abolished but, rather, that the instructional content and methods of each course take into account the life skills objectives. Each teacher must decide how to infuse the learning of these skills into the course material so it is motivating and meaningful for students.

An example of infusion was presented by Lamkin (1980) in her monograph on infusing career education goals into an on-going curriculum. The pre-existing objective of the course is the correct writing of connected sentences. The link to life skills was provided by suggesting to a particular student that a work station be explored and sentences be constructed around that experience. The infusion was accomplished without loss of time and probably with gains in motivation and occupational awareness.

The objective was formulated as follows:

Curriculum Area:	Language Arts
Annual Goal:	Juan will increase his oral vocabulary through the use of expressive language.
Short-Term Objective:	Juan will dictate an experience story containing a minimum of five complete sentences.
Career Education Activity:	Visit the school cafeteria to observe meal preparation. Try to find answers to the following questions: What are we having for lunch today? What utensils and equipment are being used to prepare the meal? How many different workers are helping? What jobs are they doing? What health and safety rules are being followed? How do these workers help each other? How do they plan ahead so that lunch will be ready on time? What school skills help them in their work? Following the visit, dictate a report or story about what you saw and learned. Use a tape recorder or dictate your report to the teacher or teacher aide. (Lamkin, 1980, p. 15)

Clark (1979) also offered an example of the infusion approach: When a science class focuses on the concept of toxicity, the instructional activities can include learning about poisons found in the home. This presents a science concept in the context of a daily living skill which can easily be used to involve parental cooperation.

Some other examples of infusing career/life skills into curriculums are presented from the Missouri Career Education Delivery System Handbook (Arni, Magnuson, Sparks, & Starr, 1977):

1. Math Activities (K-3)

   - Use calendars to figure how many weeks of work in a month. How many work days in a month? How many days a month do your parents work?

- Keep record of recess time, study time, sleep time they use each day. Relate this to logs kept by banks, long distance truck drivers, telephone operators.

- Compare number of servings to cost per box of cereal. This could be related to restaurant owners and homemakers.

2. Science Activities (K-3)

- Analyze and describe two effects on an ecological community of a particular proposed project (a housing development, a new road, a new park, a new dam).

- Have the children bring various sized milk cartons that have been emptied. Use the cartons to teach liquid measurement. Discuss how many people are needed to get milk from the cow to consumer. Make a chart to show the progression.

- After a discussion about fire, have students divide into small groups and plan a short skit about a situation concerning fire and firefighters. The students choose their characters, plan their show and write a script. The boys and girls then construct sack puppets to fit the situations planned.

3. Language Arts/Reading Activities (4-6)

- Students will brainstorm all their ways of collecting information in regard to decisions they make daily (e.g., teachers, principals, other students). Students will discuss which people play the most influential role for them at school (or home) in decision making.

- Take a World of Work trip to local radio station to learn of possible jobs available in the field of broadcasting. After World of Work trip have students organize into groups and put on a radio program including such workers as announcer, writers, newscasters, weather reporter and sports announcer.

4. Physical Education Activities (7-9)

- Research nonparticipatory sports fields such as sportscasting, statisticians.

- Ask students to study different careers for physical and mental advantages and disadvantages.

- Have students role play a sports announcer and set up a sports schedule.

5. Math Activities (10-12)

- The students will itemize their expenditures for a two-week period and compute what percentage of the total amount was spent each day. The students will study this information and determine if and how their money could be put to wiser use.
- Talk about ways different workers use the arithmetic mean.
- Use actual bills to help students gain an awareness of the cost of utilities by totaling the cost of water, electric, and gas bills.

6. Science Activities (10-12)

- Obtain a guest speaker to describe the science opportunities available in your area. Discuss the number of people going into various fields, what new fields are opening up, and those that tend to be filling up.
- Organize the class into small groups, each of which will act as a panel for 20 questions. Each panel will present to the class an example of a skill or concept used in an occupation related to science. If the class cannot identify the occupation within 20 questions that require a "yes" or "no" answer, the panel wins.

Life skills, such as the 22 life-centered competencies identified by Brolin (1978), provide an organized framework for focusing the school curriculum on the important skills needed by students to function as adults. The competencies should be given early attention and made a substantial part of the entire K-12 curriculum. Some of these skills must be given considerable attention during the elementary years whereas others (e.g., occupational decision making) should be emphasized later. An example of a competency that must be initiated early is "Caring for Personal Needs." A mentally handicapped student may need help in this area, for example, in toileting and washing hands. More able students may learn this skill incidentally or need only minimal attention to some of the higher order subcompetencies later on. It is important not to assume that students learn all these life skills in out-of-school situations. Nothing can be

taken for granted. Many families will not admit it, but even nonhandicapped students often need specific instruction in a number of these life skill areas. Some particularly important skills that many students often lack are use of recreational/leisure time, self-awareness, self-confidence, problem solving, and sex education.

Assessing Life Skills

Extensive attention to the entire area of assessment has been given by Reynolds and Birch (1982) and Hofmeister and Preston (1981); the latter is a module prepared for this series. Reynolds and Birch pointed out,

> Testing is only one way of obtaining information about an individual; assessment involves far more. It may include such aspects, for example, as examination of school and health records; a case history prepared by a social worker; interviews with parents, teachers, or other persons; observations of the child in the classroom or in other settings; the use of educational or other tests; and special examinations conducted outside the school by specialists. Nothing is taken for granted. Every factor that could reasonably affect how the child learns is examined and its possible influence is evaluated. (p. 61)

Hofmeister and Preston identified six sources of valuable information on a student's functioning: (a) inspection of the child's record files; (b) informal consultation with others who know the child; (c) structured interviews; (d) observation; (e) norm-referenced tests; and (f) criterion-referenced tests.

Halpern, Lehmann, Irvin, and Hiery (1982) noted that traditional assessment has been based on the assumption that measures of one's aptitudes, interests, and traits can be used to predict subsequent learning, performance, and adjustment. However, contemporary assessment, which he and his associates recommend for retarded and other handicapped students, emphasizes the importance of direct assessment of actual competencies. It also

requires that the outcomes of measurement have direct implications for program planning. They identified three general approaches to applied performance assessment: (a) direct assessment of criterion behaviors in real or simulated settings; (b) measurement of knowledge on those criterion behaviors; and (c) evaluation of how students learn new competencies.

To ascertain a student's competence in life skills, it appears that norm-referenced tests, in which one's performance is compared relative to others, is not the most appropriate method of assessment. Instead, a type of criterion-referenced testing that assesses the student's mastery or competence in specific areas is more useful. The focus in criterion-referenced tests is on what the student knows and/or can do. There are no comparisons with how many individuals possess the knowledge or skill (Popham & Husek, 1969). Assessment provides information on a student's level of proficiency in a particular subject skill. The individual's strengths and weaknesses can be discerned, individual IEPs written, immediate curriculum planned, and individual and group progress can be monitored.

The assessment approach that was devised for the Life-Centered Career Education Curriculum was a Competency Rating Scale (CRS) (Brolin et al., 1978). The CRS assesses the student's level of life skills in each of the 22 competency areas by asking a teacher to judge the individual's mastery of each of the 102 subcompetencies. The teacher may use at least three sources to derive the rating for each subcompetency: (a) immediate personal observation of student performance and behavior; (b) personal records or notes on student performance; and (c) written or verbal reports from other persons. The latter is considered the least valid source of information but may be necessary to substantiate the other information.

When sufficient information exists to rate a subcompetency, the following rating scale is used:

0 = Not competent

1 = Partially competent

2 = Competent

NR = Not rated

The CRS Record Form is separated into three sections corresponding to the three domains: Daily Living Skills; Personal-Social Skills; and Occupational Guidance and Preparation. A sample CRS Record Form for one domain (Daily Living Skills) is presented in Figure 1.

Each of the three parts (domains) of the CRS can be administered independently. It is recommended that one individual rate all subcompetencies in a particular domain. The CRS Manual (see Appendix C) describes and defines each subcompetency by behavioral criteria. A rank ordering of the criteria for each subcompetency in order of importance was done by five national experts in education. The rater must compare student performance with the behavioral criteria for each subcompetency to determine the degree of mastery.

Conclusion

The major skills needed by students for community living and working have been identified. One particular model, the Life-Centered Career Education Curriculum, based on several years of developmental work with hundreds of educators in school districts across the country, has been presented. Life skills education requires the understanding and active involvement of all school personnel, the student's family, and the involvement of an array of community resources, including business and industry.

FIGURE 1

LIFE CENTERED CAREER EDUCATION

Competency Rating Scale
Record Form

Experimental[1]

DAILY LIVING SKILLS

Student Name_____ Date of Birth_____ Sex _____

School_____ City_____ State _____

Directions: Please rate the student according to his/her mastery of *each* item using the rating key below. Indicate the ratings in the column below the date for the rating period. Use the NR rating for items which cannot be rated. For subcompetencies rated 0 or 1 at the time of the final rating, place a check (✓) in the appropriate space in the *yes/no* column to indicate his/her ability to perform the subcompetency with assistance from the community. Please refer to the CRS manual for explanation of the rating key, description of the behavioral criteria for each subcompetency, and explanation of the *yes/no* column.

Rating Key: 0 = Not Competent 1 = Partially Competent 2 = Competent NR = Not Rated

To what extent has the student mastered the following subcompetencies:

Subcompetencies	*Rater(s)*	MM	MM							
	Grade Level	10	10							
	Date(s)	9/1/77	5/1/78							
									Yes	*No*
1. Managing Family Finances										
1. Identify money and make correct change		1	*2	—	—	—	—	—	—	—
2. Make wise expenditures		1	*2	—	—	—	—	—	—	—
3. Obtain and use bank and credit services		1	*2	—	—	—	—	—	—	—
4. Keep basic financial records		0	*1	—	—	—	—	—	—	—
5. Calculate and pay taxes		0	*1	—	—	—	—	—	—	—
2. Selecting, Managing, and Maintaining a Home										
6. Select adequate housing		1	1	—	—	—	—	—	—	—
7. Maintain a home		1	1	—	—	—	—	—	—	—
8. Use basic appliances and tools		1	1	—	—	—	—	—	—	—
9. Maintain home exterior		0	1	—	—	—	—	—	—	—
3. Caring for Personal Needs										
10. Dress appropriately		1	2	—	—	—	—	—	—	—
11. Exhibit proper grooming and hygiene		2	2	—	—	—	—	—	—	—
12. Demonstrate knowledge of physical fitness, nutrition and weight control		1	1	—	—	—	—	—	—	—
13. Demonstrate knowledge of common illness prevention and treatment		1	1	—	—	—	—	—	—	—
4. Raising Children and Enriching Family Living										
14. Prepare for adjustment to marriage		1	1	—	—	—	—	—	—	—
15. Prepare for raising children (physical care)		0	1	—	—	—	—	—	—	—
16. Prepare for raising children (psychological care)		0	1	—	—	—	—	—	—	—
17. Practice family safety in the home		1	1	—	—	—	—	—	—	—

[1]The CRS is a research instrument developed at the University of Missouri-Columbia. Data resulting from the use of the CRS should be clearly labeled experimental and should be interpreted with appropriate caution. Direct inquiries to: Donn E. Brolin, 16c Hill Hall, University of Missouri, Columbia MO 65201.

FIGURE 1
(CONT.)

Subcompetencies	Rater(s)	MM	MM							
	Grade Level	10	10							
	Date(s)	9/1/77	5/1/78							
5. Buying and Preparing Food									Yes	No
18. Demonstrate appropriate eating skills		2	2	—	—	—	—	—	—	—
19. Plan balanced meals		1	1	—	—	—	—	—	—	—
20. Purchase food		1	1	—	—	—	—	—	—	—
21. Prepare meals		1	1	—	—	—	—	—	—	—
22. Clean food preparation areas		1	1	—	—	—	—	—	—	—
23. Store food		1	1	—	—	—	—	—	—	—
6. Buying and Caring for Clothing										
24. Wash clothing		2	2	—	—	—	—	—	—	—
25. Iron and store clothing		1	2	—	—	—	—	—	—	—
26. Perform simple mending		1	1	—	—	—	—	—	—	—
27. Purchase clothing		1	2	—	—	—	—	—	—	—
7. Engaging in Civic Activities										
28. Generally understand local laws and government		1	2	—	—	—	—	—	—	—
29. Generally understand federal government		1	1	—	—	—	—	—	—	—
30. Understand citizenship rights and responsibilities		1	2	—	—	—	—	—	—	—
31. Understand registration and voting procedures		0	1	—	—	—	—	—	—	—
32. Understand selective service procedures		0	0	—	—	—	—	—	—	—
33. Understand civil rights and responsibilities when questioned by the law		1	1	—	—	—	—	—	—	—
8. Utilizing Recreation and Leisure										
34. Participate actively in group activities		2	2	—	—	—	—	—	—	—
35. Know activities and available community resources		1	2	—	—	—	—	—	—	—
36. Understand recreational values		1	1	—	—	—	—	—	—	—
37. Use recreational facilities in the community		1	1	—	—	—	—	—	—	—
38. Plan and choose activities wisely		1	1	—	—	—	—	—	—	—
39. Plan vacations		0	0	—	—	—	—	—	—	—
9. Getting around the Community (Mobility)										
40. Demonstrate knowledge of traffic rules and safety practices		1	1	—	—	—	—	—	—	—
41. Demonstrate knowledge and use of various means of transportation		1	1	—	—	—	—	—	—	—
42. Drive a car		1	1	—	—	—	—	—	—	—
*Total Possible Score (TPS) = N × 2 84, 84	*Total actual Score (TAS)	38	50	—	—	—	—	—		
	*Average Score (AS) = TAS/N	.90	1.19							

Comments: _____

*Refer to the CRS manual for calculation and interpretation.

Implementing a life skills curriculum requires careful leadership, time and money, but, above all, it requires an understanding and committed faculty.

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APPENDIX A

Examples of Life Skills Curriculums

APPENDIX A

Examples of Life Skills Curriculums

Adult Basic Literacy Assessment Kit (1981)
Author: Not listed; several contributors
Address: Provence of British Columbia, Publications Services Branch
Ministry of Education
878 Viewfield Road
Victoria, B.X. V9A 4V1
Cost: $10.00

An Activities of Daily Living Curriculum for Handicapped Adults (1978)
Author: Chuck Tiller
Address: Magic Valley Rehabilitation Services, Inc.
Rt. #2, Eastland Drive South
Twin Falls, Idaho 83301
Cost: $22.50

Becoming Independent: A Living Skills System (1978)
Author: Ann Westaway and Tony Apolloni
Address: Edmark Associates
P. O. Box 3903
Bellevue, Washington 98009
Cost: $225.00

Community Living Skills: Assessment and Training (Revised 1978)
Author: Robert L. Conroy
Address: Hope Enterprises, Inc.
1536 Catherine Street
P. O. Box 1837
Williamsport, Pennsylvania 17701
Cost: $6.75

Community Living Skills Screening Test and Remediation Manual (Revised 1980)
Author: Robert L. Schalock and Linda S. Gadwood
Address: P. O. Box 1146
522 East Side Blvd.
Hastings, Nebraska 68901
Cost: $40.00

Home and Family Living Laboratory (1978)
Author: Patricia Tramp
Address: Saint Paul Public Schools
Bridge View School
360 Colborne Street
St. Paul, Minnesota 55102
Cost: $15.00

Independent Living Behavior Checklist (1979)
Author: Richart T. Walls, Thomas Zanc, John E. Thuedt
Address: West Virginia Rehabilitation Research and Training Center
509 Allen All
West Virginia University
Morgantown, West Virginia 26506
Cost: $5.00

Independent Living Skills Curriculum (1981)
Author: V. Taylor, D. Close, C. Carlson, D. Larrabee
Address: Materials Distribution
Rehabilitation Research and Training Center in Mental Retardation
2nd Floor Clinical Services Building
University of Oregon
Eugene, Oregon 97403
Cost: $52.75

Skills to Achieve Independent Living (1975)
Author: not listed
Address: Melton Peninsula, Inc.
1949 Stemmons Freeway, Suite 690
Dallas, Texas 75207
Cost: Teacher's Manual $5.95; Kit $245.00

Life-Centered Career Education: A Competency-Based Approach
Author: Donn E. Brolin (Ed.)
Address: Council for Exceptional Children
1920 Association Drive
Reston, Virginia 22091
Cost: $13.75

Social Perceptual Training Kit for Community Living for Trainable and Educable Retarded Citizens (1978)
Author: not listed
Address: Educational Activities, Inc.
P. O. Box 392
Freeport, New York 11520
Cost: Book $10.95; Kit $225.00

The Individual Assessment and Program Guide (1976)
Author: Gary Fisher
Address: Developmental Services, Inc.
Residential Services Division
Box 1023
Columbus, Indiana 47201
Cost: $3.60

Toward Independent Living (1980)
Author: B. Baker, A. Brightman, S. Hinchaw
Address: Research Press
2612 North Mattis Avenue
Champaign, Illinois 61820
Cost: $7.95

Training for Independent Living (1975)

Author: Jim White

Address: Ventura County Association for the Retarded, Inc.
P. O. Box 646
1732 Lewis Road
Camarillo, California 93010

Cost: $20.00

APPENDIX B

Articles On Life Skills Education

1. Life-Centered Career Education for Exceptional Children

2. Nixa Answers the Question: What is a Basic Education?

3. Independent Living Skills Can Be Taught

VOLUME 14 NUMBER 7 MARCH 1982

FOCUS ON EXCEPTIONAL CHILDREN

Life-Centered Career Education for Exceptional Children

Donn E. Brolin

Approximately 10 years have elapsed since career education entered the national scene (Marland, 1971). Introduced as a major educational reform, it has gradually gained momentum. School systems throughout the country have adopted it in their programs. The basic tenets of and the need for career education have become increasingly more apparent to educators and others concerned about educational services to students. Creation of a U.S. Office of Career Education in 1974 gave the necessary impetus to the movement, and under the able leadership of its first and present director, Kenneth B. Hoyt, at least some facet of career education has become an integral part of curricula in the majority of American schools.

In the case of exceptional children, career education has sustained an even more pronounced effort. Backed by endorsement from the national special education teacher organization, the Council for Exceptional Children (CEC), special educators and those concerned about their students' career development have responded to the need to redirect curricula so that it is more relevant and practical to community living and working needs required in the real world. Extensive overviews on career education for exceptional individuals have been written by Brolin and Kokaska (1979), C. Johnson (1979), and Kolstoe (1981). Recent examples of effective career education practices have been set forth by D. Johnson (1979), Evenson and Spotts (1980), Gillet (1980), Borba and Guzicki (1980), Lamkin (1980), Ellington (1981), Brolin (in press), and others.

Many national and state conferences on career education for exceptional children have been conducted during the past several years. Curriculum materials, inservice models, and special mini-grants from special education and career education departments at the state level have assisted educators in implementing career education concepts. A new CEC division, the Division on Career Development

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(DCD), was organized in 1976 and is growing in stature and significance by providing leadership to the field. In the past three years 10 states have organized their own DCD units so that career education will become a substantial force in services to exceptional students at the grass roots level. Many other states are close to becoming official units at the time of this writing.

Despite general acceptance of the career education concept and need, exceptional students still are not receiving the amount and type of career education that will result in their successful community adjustment as adults. Heller (1981, p. 582) identified the following deficiencies as presently existing in programming for exceptional students at the secondary level: (a) school organization being too much along departmental and subject matter lines, (b) orientation of training programs toward the younger handicapped child, (c) too heavy an emphasis placed on vocational programs by special educators without any alternatives or future planning, and (d) the attitude of special educators and others that exceptional individuals don't require much attention at the secondary level. And, Sitlington (1981, p. 596) noted that ". . . vocational education programs: (a) usually do not begin until 11th grade, which is often too late for the handicapped student, (b) by definition are concerned primarily with specific skill training, with little emphasis on career awareness and exploration, and (c) have in-class components that are often too difficult for the handicapped learner." In addition, 13 advocacy groups calling themselves the Education Advocates Coalition has cast doubts on progress of the Education for All Handicapped Children's Act of 1975 (PL 94-142), calling the response to its mandate a "national disgrace" (*Guidepost*, 1980).

Career education offers an organized K-12+ approach to correcting the deficiencies presently inherent in curricula for exceptional (and other) students. As Kolstoe (1981) noted, "Career education offers a service delivery that has great potential for the 1980s" (p. 11).

Several models that have emerged in special education deserve attention by educators interested in the career education approach: (a) Clark's (1979) School-Based Career Education Model, (b) Larson's (1981) adaptation of the Experience-Based Career Education Model (EBCE), and (c) the work of this writer and his colleagues in developing the Life-Centered Career Education (LCCE) Model during the decade of the 1970s. Actually, the three models can be nicely integrated by school personnel who desire an even more comprehensive approach to curriculum development for the students.

This article presents the Life-Centered Career Education (LCCE) Model, a competency-based approach. Readers interested in the Clark and Larson models are encouraged to contact these individuals directly for further information about their career education concepts and methods.[1] Before presenting the LCCE Model, a brief review of career education is given so that readers unfamiliar with its basic tenets will be better able to understand the total concept.

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THE CAREER EDUCATION CONCEPT

At the Helen Keller Centennial Conference in 1980, Kenneth Hoyt noted that ". . . the career education concept, formally begun in 1971, has survived for a full decade — three times as long as the typical educational reform movement. During this period of time, it has developed and specified its basic goals and demonstrated its ability to deliver career education to the general population of K-12 youth. It is a concept that

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holds great implications for persons with visual handicaps — both youth *and* adults" (Hoyt, 1980, p. 8). At that conference, he described *career education* as:

> . . . making *work* a personally meaningful and productive part of the total lifestyle of all persons . . . that *work*, as used in career education, is defined as "conscious effort, other than that aimed primarily at coping or relaxation, to produce benefits for oneself and or for oneself and others." Furthermore, the word "career," as used in career education, is defined as "the totality of work one does in his, her lifetime." (p. 2)

Considerable confusion has existed for years about interpretation of the word "career" in career education. Many educators define the term synonymously and narrowly with "job" or "occupation," whereas others (like myself) view one's career as consisting of numerous roles, including work activities that are nonoccupational. Donald Super (1976) defined *career* as:

> . . . the sequence of major positions occupied by a person throughout his preoccupational, occupational, and postoccupational life; includes work-related roles such as those of student, employee, and pensioner, together with complementary avocational, familial, and civic roles. Careers exist only as people pursue them; they are person-centered. (p. 20)

This definition, written for the U.S. Office of Career Education, clearly distinguishes career education from vocational education, which is primarily an occupationally-oriented program (except for the homemaking aspect). Unpaid work such as volunteer work, productive use of leisure time, the unpaid work of the fulltime homemaker, and the school work of the student are all within the realm and goals of career education.

The Council for Exceptional Children (1978) supports the broader view of career education, based on the work of its study group, by defining it in the following manner:

> *Career education* is the totality of experiences through which one learns to live a meaningful, satisfying work life . . . providing the opportunity to learn, in the least restrictive environment possible, the academic, daily living, personal-social, and occupational knowledges and skills necessary for attaining their highest levels of economic, personal and social fulfillment. This can be obtained through work (both paid and unpaid) and in a variety of other societal roles and personal life styles . . . student, citizen, volunteer, family member and participant in meaningful leisure-time activities.

Brolin and Kokaska (1979, p. 104) offered the following key concepts consistent with the above conceptualization of career education:

- It extends from early childhood through the retirement years.
- It focuses on the full development of all individuals.
- It provides the knowledge, skills, and understandings needed by individuals to master their environment.
- It emphasizes daily living, personal-social, and occupational skills development at all levels and ages.
- It encompasses the total curriculum of the school and provides a unified approach to education for life.
- It focuses on the total life roles, settings, and events and their relationships that are important in the lives of individuals, including work.
- It encourages all members of the school community to have a shared responsibility and a mutual cooperative relationship among the various disciplines.
- It includes learning in the home, private-public agencies, and the employment community, as well as the school.
- It encourages all teachers to relate their subject matter to its career implications.
- It includes basic education, citizenship, family responsibility, and other important education objectives.
- It provides for career awareness, exploration, and skills development at all levels and ages.
- It provides a balance of content and experiential learning, permitting hands-on occupational activities.
- It provides a personal framework to help individuals plan their lives, including career decision-making.
- It provides the opportunity for acquiring a saleable occupational entry-level skill upon leaving high school.
- It requires a lifelong education based on principles related to total individual development.
- It actively involves the parents in all phases of education.
- It actively involves the community in all phases of education.
- It encourages open communication between students, teachers, parents, and the community.

Career education is not intended to replace traditional education but, rather, to redirect it to be more relevant and meaningful for the student and to result in the acquisition of attitudes, knowledges, and skills one needs for successful community living and working. It is not meant to be the only education students receive, but it should be a substantial part of the curriculum.

Career education requires the integration or infusion of career education concepts into the content of various subject matter. It ". . . brings meaningfulness to the learning and practice of basic academic skills by demonstrating to the students and teachers alike the multitude of ways in which these skills are applied in work and daily living. A career education emphasis brings observable, experiential relevance to social studies, health, and science curricula, assisting students in perceiving the relationship between educational subject matter and the larger world outside the classroom" (Lamkin, 1980, p. 11). To achieve this, teachers have to find new ways of providing career relevant experiences within a career education context. Hands-on, experiential activities that facilitate the career development process so that students learn about the world in which they live and will work as adults are key ingredients in the career education curriculum approach.

As indicated by Wimmer (1981, pp. 615-616), "If one assumes that the goal of the educational program for a handicapped student is to prepare the student for independent living and social and vocational success, it would seem that instruction should be planned around a career development theme." Nevertheless, Meyen and White (1980, pp. 120-121) noted that although most educators would agree on the basic need for and the tenets of career education, its implementation in a comprehensive sense has spread somewhat slowly across the country. They identified the following factors as reasons:

- Rarely does career education exist as a specific service or separate programming option. Career education programming may indeed exist in a school district (infused into the regular curriculum or even as a few separate courses), but few districts have career education as a visible programming option.
- Career education content does not fall into a precise developmental sequence or hierarchy.
- There is no normative reference base for comparing individuals on career education concepts and skills. Continuous instructional planning requires ongoing evaluation. . . . The general absence of evaluation procedures and instruments in career education makes continuous evaluation difficult.

Meyen and White also believe that career education's short history and the lack of teacher experience in individualizing career education are additional barriers: "Teachers continue to write IEP objectives for the student in curriculum areas for which well-established curricula already exist" (p. 122). Wimmer (1981, p. 613) stated that, "The major problem seems to lie in the basic assumption of some educators that the handicapped student must either adjust to the traditional structure of the secondary school or be taught in a totally separate environment."

I agree with the above writers about the problems in implementing the career education concept and process in many school systems. Unfortunately, the easier way is often selected when deciding upon a curriculum for the year. But schools that have adopted a comprehensive career education approach have demonstrated that students are happier and more successful if they receive this type of education. As a result, most of the educators seem to be more satisfied with their efforts, too!

The remainder of this article focuses on a curriculum approach that has evolved during the 1970s with the assistance of hundreds of special educators and other school personnel who have felt the need to change their curricula to a more career education-oriented approach. The result has been a competency-based approach entitled *Life-Centered Career Education (LCCE)*. The curriculum model has been adopted by several hundred school systems throughout the country and is available from the Council for Exceptional Children (CEC) in the form of two products, *Life-Centered Career Education: A Competency-Based Approach* (Brolin, 1978) and *Trainer's Guide for Life-Centered Career Education* (Brolin, McKay, & West, 1978).

DEVELOPMENT OF THE LCCE APPROACH

Initial efforts in developing the life-centered curriculum began in 1970, with a federal grant from the U.S. Office of Education, Bureau of Education for the Handicapped (now Office of Special Education) to design a more vocationally-oriented secondary special education teacher training program model at the University of Wisconsin - Stout. The project officer encouraging this effort was Bill Heller, presently Dean, College of Human Development and Learning, University of North Carolina at Charlotte. Dr. Heller was then, as he still is today (Heller, 1981), concerned about the lack of trained personnel to carry out vocational (and career) functions at the secondary level.

Although the primary effort of the Stout project was to identify competencies that secondary teachers of educable retarded students needed to prepare their students for adult functioning, it became necessary to also determine what kind of skills (or competencies) the students needed to acquire for success after schooling would be completed. This work continued with another

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BEH (OSE) project from 1974-1977 to develop a career education, competency-based curriculum and an inservice training program for school personnel for implementing the program. Entitled PROJECT PRICE (Programming Retarded In Career Education), the effort involved 12 school districts throughout the United States and over 300 school personnel. The final products were extended to other disability groups at the conclusion of the project, with the assistance of CEC.

Thus, the LCCE Model has evolved from several years of developmental work and includes the involvement of several hundred educators and many special/career education experts. Research conducted on these two projects in the 1970s (Brolin & Thomas, 1972; Brolin, 1973; and Brolin, Malever, & Matyas, 1976) has resulted in this competency-based approach to assist educators in infusing career education into curriculum.

THE LCCE CURRICULUM MODEL

The LCCE Curriculum Model promotes the students' acquisition of 22 major competencies falling into three major categories: (a) daily living, (b) personal-social, and (c) occupational skills. These competencies represent what research, practitioner experience, and expert opinion have deemed essential for successful career development. The three curriculum areas (categories), competencies, and subcompetencies are presented in Figure 1.

The LCCE Model interfaces the 22 competencies with two other important dimensions of career education: (a) school, family, and community experiences, and (b) four stages of career development — awareness, exploration, preparation, and placement/ follow-up/ continuing education. Figure 2 presents a three-dimensional model to illustrate the interaction of these components and the LCCE approach. It views career education as a process for systematically coordinating all school, family, and community components to facilitate each individual's potential for economic, social, and personal fulfillment (Brolin, 1974).

The Competencies

All the competencies and their 102 subcompetencies were subjected to rigorous review by hundreds of school personnel throughout the country. They endorsed our contention that these competencies generally reflect the major outcomes that should be expected for students if they are to be prepared successfully for community living and working. Clark and White (1980) have described the LCCE Model as the "adult adjustment approach" because of the focus on skills and competencies needed for a person's life career.

Daily Living Skills

Nine Daily Living Skills (DLS) relate to avocational, family, leisure, and civic work activities. Inspection of these competencies should also reveal the occupational implications for career development. Students who have interests and abilities in certain DLS areas (for example, family finances) might also be counseled toward occupations related to those competencies.

Personal-Social Skills

Seven Personal-Social Skills (PSS) are important to family, community, and occupational functioning. These competencies relate to helping the student understand self, build confidence, solve problems, become independent, interact successfully with others, make decisions, conduct self properly in public, and communicate adequately with others. Past experience and research have clearly indicated that a lack in these competencies poses serious problems for exceptional students after they leave school and attempt to secure and maintain employment.

Occupational Skills

Six occupational competencies fall under the curriculum area entitled Occupational Guidance and Preparation. Two of the competencies pertain to learning about the world of work; they entail exploring work possibilities (occupational awareness) and making occupational choices (decision-making). Three competencies relate to building specific vocational skills (work habits, physical capacities, entry-level job skill), and one competency focuses on the process of seeking, securing, and maintaining a job. Occupational awareness, work habits, and physical-manual skills can be developed throughout a K-12 program.

Again, this competency-based approach does not deemphasize basic academic instruction. It does, however, require that instruction be directed so that students can learn the competencies. Therefore, school personnel must determine how they can infuse career education concepts and competencies into their curricula.

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Figure 1
Life-Centered Career Education, Curriculum Areas, Competencies, and Subcompetencies

Curriculum Area	Competency		
Daily Living Skills	1. Managing Family Finances	1. Identify money and make correct change.	2. Make wise expenditures.
	2. Selecting, Managing, and Maintaining a Home	6. Select adequate housing.	7. Maintain a home.
	3. Caring for Personal Needs	10. Dress appropriately.	11. Exhibit proper grooming and hygiene.
	4. Rearing Children, Enriching Family Living	14. Prepare for adjustment to marriage.	15. Prepare for rearing children (physical care).
	5. Buying and Preparing Food	18. Demonstrate appropriate eating skills.	19. Plan balanced meals.
	6. Buying and Caring for Clothing	24. Wash clothing.	25. Iron and store clothing.
	7. Engaging in Civic Activities	28. Generally understand local laws and government.	29. Generally understand federal government.
	8. Utilizing Recreation and Leisure	34. Participate actively in group activities.	35. Know activities and available community resources.
	9. Getting Around the Community (Mobility)	40. Demonstrate knowledge of traffic rules and safety practices.	41. Demonstrate knowledge and use of various means of transportation.
Personal-Social Skills	10. Achieving Self Awareness	43. Attain a sense of body.	44. Identify interests and abilities.
	11. Acquiring Self Confidence	48. Express feelings of worth.	49. Tell how others see him/her.
	12. Achieving Socially Responsible Behavior	53. Know character traits needed for acceptance.	54. Know proper behavior in public places.
	13. Maintaining Good Interpersonal Skills	58. Know how to listen and respond.	59. Know how to make and maintain friendships.
	14. Achieving Independence	62. Understand impact of behaviors upon others.	63. Understand self organization.
	15. Achieving Problem Solving Skills	66. Differentiate bipolar concepts.	67. Understand the need for goals.
	16. Communicating Adequately with Others	71. Recognize emergency situations.	72. Read at level needed for future goals.
Occupational Guidance and Preparation	17. Knowing and Exploring Occupational Possibilities	76. Identify the personal values met through work.	77. Identify the societal values met through work.
	18. Selecting and Planning Occupational Choices	82. Identify major occupational needs.	83. Identify major occupational interests.
	19. Exhibiting Appropriate Work Habits and Behaviors	87. Follow directions.	88. Work with others.
	20. Exhibiting Sufficient Physical-Manual Skills	94. Demonstrate satisfactory balance and coordination.	95. Demonstrate satisfactory manual dexterity.
	21. Obtaining a Specific Occupational Skill		
	22. Seeking, Securing, and Maintaining Employment	98. Search for a job.	99. Apply for a job.

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Subcompetencies

3. Obtain and use bank and credit facilities.	4. Keep basic financial records.	5. Calculate and pay taxes.		
8. Use basic appliances and tools.	9. Maintain home exterior.			
12. Demonstrate knowledge of physical fitness, nutrition, and weight control.	13. Demonstrate knowledge of common illness prevention and treatment.			
16. Prepare for rearing children (psychological care).	17. Practice family safety in the home.			
20. Purchase food.	21. Prepare meals.	22. Clean food preparation areas.	23. Store food.	
26. Perform simple mending.	27. Purchase clothing.			
30. Understand citizenship rights and responsibilities.	31. Understand registration and voting procedures.	32. Understand Selective Service procedures.	33. Understand civil rights and responsibilities when questioned by the law.	
36. Understand recreational values.	37. Use recreational facilities in the community.	38. Plan and choose activities wisely.	39. Plan vacations.	
42. Drive a car.				
45. Identify emotions.	46. Identify needs.	47. Understand the physical self.		
50. Accept praise.	51. Accept criticism.	52. Develop confidence in self.		
55. Develop respect for the rights and properties of others.	56. Recognize authority and follow instructions.	57. Recognize personal roles.		
60. Establish appropriate heterosexual relationships.	61. Know how to establish close relationships.			
64. Develop goal seeking behavior.	65. Strive toward self actualization.			
68. Look at alternatives.	69. Anticipate consequences.	70. Know where to find good advice.		
73. Write at the level needed for future goals.	74. Speak adequately for understanding.	75. Understand the subtleties of communication.		
78. Identify the remunerative aspects of work.	79. Understand classification of jobs into different occupational systems.	80. Identify occupational opportunities available locally.	81. Identify sources of occupational information.	
84. Identify occupational aptitudes.	85. Identify requirements of appropriate and available jobs.	86. Make realistic occupational choices.		
89. Work at a satisfactory rate.	90. Accept supervision.	91. Recognize the importance of attendance and punctuality.	92. Meet demands for quality work.	93. Demonstrate occupational safety.
96. Demonstrate satisfactory stamina and endurance.	97. Demonstrate satisfactory sensory discrimination.			
100. Interview for a job.	101. Adjust to competitive standards.	102. Maintain postschool occupational adjustment.		

Source: Adapted from *Life-Centered Career Education: A Competency-Based Approach*, by D. E. Brolin (Reston, VA: Council for Exceptional Children, 1978).

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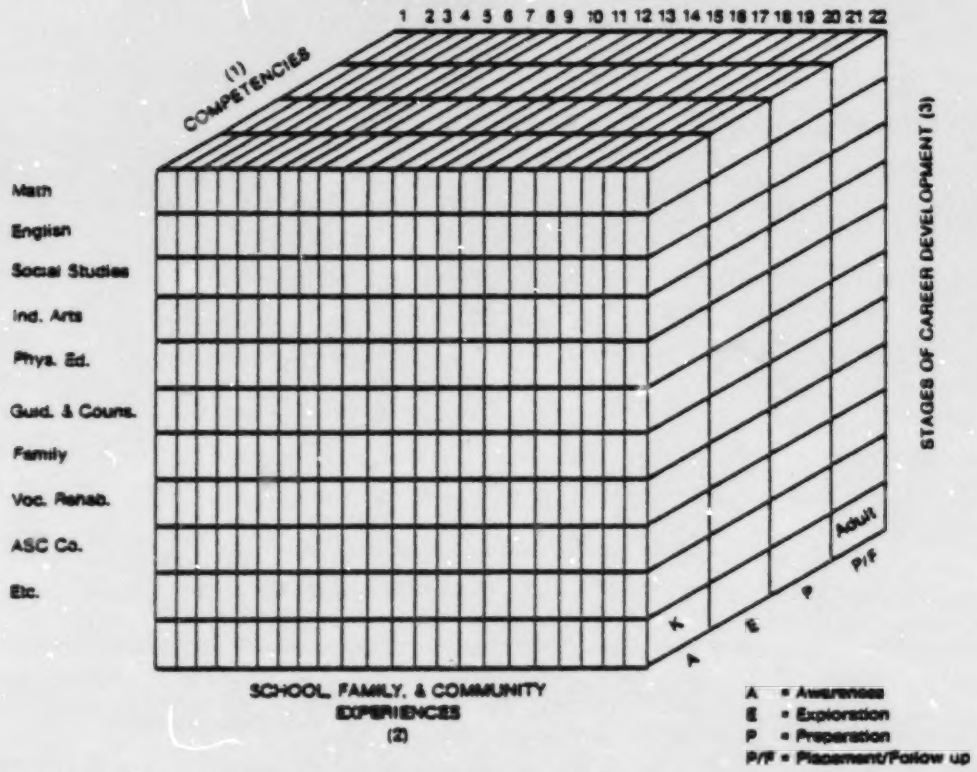
Figure 2
Career Competency Based Model for Infusing Education into Curriculum



Source: Adapted from *Career Education for Handicapped Children and Youth*, by D. E. Brolin and C. J. Kokaska (Columbus, OH: Charles E Merrill, 1979).

School, Family, and Community Experiences

A comprehensive curriculum approach like LCCE requires close working relationships with three groups — the student's family, community agencies and organizations, and business and industry. This brings a realistic, meaningful aspect to the student's education, because it relates directly to performing occupational and daily living activities.

School Personnel

The LCCE curriculum approach advocates a changing role for special education teachers involved with students who can be placed in regular classes and programs. The special educator should become more of a consultant, advisor to school personnel who are teaching the student competencies and other topics. The special educator also has to work closely with parents, community agencies, and industries, integrating and coordinating career development efforts to benefit each student. Further, the special educator should serve as a resource specialist to regular classroom teachers relative to instructional techniques and materials, student information, disability information, career development planning, and the like.

The Family

The LCCE approach promotes greater utilization of the student's family in providing career development experiences in the home and community. Because personal-social development is so important, the special educator can be of invaluable assistance in helping families establish a psychological climate that will facilitate those important competencies. Daily living and occupational competencies can be developed through job duties in the home, family projects, and meaningful

leisure and recreational pursuits. Family involvement and cooperation can greatly increase the school program's effectiveness in helping students attain the necessary levels of career development.

The Community

Innumerable resources for career development are available in the community. Civic groups are always looking for special projects to undertake. School programs that have used the Experience-Based Career Education (EBCE) approach have been surprised at how readily business and industry open their doors to students if they feel the school is advocating a solid program. Many public and private agencies and organizations are also willing to lend support and should be utilized more frequently for career awareness, exploration, and preparation experiences.

Utilization of these three groups is critical to successful career education programming. In the past, school personnel have tended to use family and community resources sparingly. These resources must be used more substantially if the career development needs of exceptional students are to be truly met.

Career Development Stages

The LCCE Model conceives of students passing through four distinct stages of career development: career awareness, career exploration, career preparation, and career placement/ follow-up/ continuing education. The stages are described below.

Career Awareness

Awareness of the world of work is awakened early in elementary school. Children begin to learn what kinds of work (paid and unpaid) people do and the reasons they do it. The students begin acquiring their own sense of identity, seeing themselves as potential workers and, in essence, begin to form a work personality. Developing positive attitudes about work and increasing awareness of the types of work habits and abilities needed for success are important at this stage. Career awareness activities infused into the elementary curriculum add an exciting dimension to student learning and motivation. Most teachers do some of this now, but in many instances it is probably not being done enough or in an organized manner that relates to competency attainment and career development.

Career Exploration

The junior-high years mark the beginning of career exploration. This is a hands-on stage in which students explore occupational areas, avocational interests, leisure and recreational pursuits, and all other areas related to the 22 competencies and career development. Vocational evaluation should begin at this time and be provided periodically throughout the remaining school years. Community resources take on an important role; students should have the opportunity to explore firsthand the real world and its requirements. A variety of experiences must be incorporated into the students' learning so that they begin thinking more seriously about their own unique set of abilities, interests, and needs and how they relate to a future adult role. If career exploration experiences are carefully planned during the junior-high period, relevant career preparation can be undertaken in senior high.

Career Preparation

This facet of career education should begin at the high-school level and should contain a heavy experiential component. Students having the potential to acquire most or all of the 22 competencies receive relevant courses such as home economics, math, business, health, driver's education, social studies, physical education, and various vocational courses appropriate to their level of interests, needs, and abilities. The use of community resources is also extremely important. The EBCE model mentioned previously provides a methodology for involving business and industry in a meaningful job experience program followed by longer term on-the-job training. Students absolutely must be directed in the daily living and personal-social skills areas, along with the occupational.

Career Placement/ Follow-up/ Continuing Education

This is a generally neglected component of our services to exceptional children. Career placement occurring near the end of the last semester, or perhaps later, should include not only the placement on a job for pay but also the opportunity to assume responsible nonpaid adult roles relating to avocation, family living, civic and leisure/ recreational endeavors. The family takes on a particularly important role at this stage. Therefore, the special educator has to work closely and supportively with the family to assure everyone that the student has acquired a sufficient adult competency level in most or

all of the daily living and personal-social skills. A period of follow-up after the student leaves the school is important, and continuing education may be necessary some time after that if the student has difficulties or desires further training.

TEACHING THE COMPETENCIES

The LCCE Curriculum approach requires school personnel to give attention to the students' career development needs by initiating competency-based instruction in the early elementary years and following through until the student leaves the educational program. Some competencies, or some of their subcompetencies, must be taught during the elementary years, whereas others are included during the junior-high and senior-high years. The LCCE Curriculum does not specify when this instruction should begin. Rather, it is left to the discretion of school personnel who are the implementers, since they can best make that determination based on their own situation (personnel, resources, administrative posture, type of students, and so forth).

In teaching the competencies, educators should use a variety of instructional techniques and methods. These may include: games, role playing, puppetry, simulated businesses, occupational notebooks, careers of the month, field trips, learning packages, collages, job dictionaries, arts and crafts, card games, What's My Line? occupational games, values clarification exercises, guest speakers, job analysis activities, work samples, special work assignments, and others.

The Career Education Personnel Preparation (CEPP) Project at the University of Missouri-Columbia provides inservice training for Missouri educators relative to the LCCE approach. Educators undergoing training are asked to prepare a competency unit for teaching one of the subcompetencies. Examples of teacher-developed competency units for one subcompetency in each of the three curriculum areas are presented below.

EXAMPLE #1 (Nancy Seckel, Teacher)

Domain: Daily Living Skills
Competency: #9 — Getting Around the Community (Mobility)
Subcompetency: #40 — Demonstrate Knowledge of Traffic Rules and Safety Practices
Subject: Social Studies, Spelling, English (a good time to schedule this lesson would be during National Safety Week in October)

OBJECTIVES	ACTIVITIES/EVALUATION PROCEDURES	MATERIALS/RESOURCES
	Announce a safety week.	
1. The student will recognize traffic signs, signals, and markings, and will know safety rules.	1. (Monday) Pass out and discuss the red booklet on signs and the yellow card on rules. On appropriately colored posterboard, have each student make one sign and one rule. Tape all of these on the classroom walls and leave up all week. Have the weekly spelling lesson made up of words such as: diamond, triangle, octagon, pennant, square, rectangle, circle, pentagon, directional, warning, regulatory, pedestrian, crossing, railroad, signals. English assignment for the week will be to read a library book concerning safety and make a book report.	Booklets, pamphlets, handout materials* Library books Film Guest speaker Bicycle *Encourage students to put these handouts and others on a bulletin board in their homes for ready reference. This might keep the students from throwing the handouts in a drawer or the trash as soon as they get home.

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OBJECTIVES	ACTIVITIES/EVALUATION PROCEDURES	MATERIALS/RESOURCES
	Announce a coloring contest.	
2. The student will know bus safety rules.	2. (Tuesday — the last activity of the day) Pass out pamphlets on school bus safety. Have students color them with colored pencils or colored felt-tip pens. After they finish coloring, discuss each rule in the pamphlet. Pass out Safety Place Mats, and serve refreshments of red Kool-Aid®, cupcakes with yellow and green icing, representing caution signs.	
3. The student will be able to demonstrate proper use of hand signals in bicycle safety.	3. (Wednesday) Demonstrate appropriate hand signals for bicycle safety. Have all students stand beside their desks and as you say, "left turn," "right turn," "slow," or "stop," the students are to give the appropriate signals. Continue this for a few minutes until all students seem to be proficient in using these signals.	
4. The student will be aware of the State Law, the bicycle safety rules, and bicycle maintenance.	4. (Thursday) Pass out poster and yellow pamphlet on bicycling. Teacher could bring a small bicycle to classroom and show items requiring periodic safety checks. Review all points in the yellow pamphlet and give oral quiz. (Friday) Have Safety Officer from Missouri State Highway Patrol come to classroom, to show safety film and discuss safety laws and rules. Request that book reports be turned in, and administer spelling test on safety words discussed on Monday.	

EXAMPLE #2 (Elaine Keely, Teacher)

Domain: Personal-Social Skills
Competency: #10 — Achieving Self-Awareness
Subcompetency: #44 — Identify Interests and Abilities
Subject: Social Studies

OBJECTIVES	ACTIVITIES/EVALUATION PROCEDURES	MATERIALS/RESOURCES
1. The student will be able to describe himself/herself as an individual with definite likes and dislikes.	Hold a class discussion of values exhibited in certain situations. Role play what he/she would do in a given situation. Have class members participate in forced-choice group activity based on 15 likes/dislikes.	"Growing Up in America" 3" x 5" cards with description of the character and situation to be played.

OBJECTIVES	ACTIVITIES/EVALUATION PROCEDURES	MATERIALS/RESOURCES
2. The student will be able to communicate his/her unique self, including hobbies, interests, skills, and physical characteristics on tape for own or others' review.	Have student answer a series of questions on tape. These questions are to be in the areas of hobbies and interests, likes/dislikes, physical characteristics, and social preferences.	List of 15 questions beginning: "If given a choice between _____ and _____, I would do _____ (All who choose the first one go to the other side of the room.) Cassette player/recorder and recorded tape with series of questions or statements.
3. The student will be able to demonstrate or report on a favorite hobby or job he/she feels capable of performing.	Have student demonstrate how to perform some part of his/her job or hobby if demonstratable, or report on his/her job or hobby if not demonstratable.	Materials from hobbies depending on individuals' choices or job tools or reports.

EXAMPLE #3 (Sharon Bullard, Teacher)

Domain: Occupational Preparation and Guidance
Competency: #18 — Selecting and Planning Occupational Choices
Subcompetency: #65 — Identify Requirements of Appropriate and Available Jobs
Subject: "I Guess" Game

OBJECTIVES	ACTIVITIES/EVALUATION PROCEDURES	MATERIALS/RESOURCES
1. The student will be able to recognize the requirements for various occupations 2. The student will use short-term memory skills in learning the occupation requirements. 3. Students will work together in a game playing situation to improve social skills.	Have students play the "I Guess" game (two or more required) a. Place 15 picture cards in pockets. b. Place description cards face down. c. Designate one person as the "reader." From the top of the stack, the reader reads aloud the job description. d. Have the player(s) give the answer and the number of the pocket which he/she thinks contains the matching word. e. Ask reader to turn over the card in that pocket and allow the player(s) to see it. The card is replaced if incorrect; if correct, it is given to the player who made the correct response. If a player chooses the "I Guess" pocket and the correct picture is *not* in it, the player is out of the game. Most cards wins.	"I Guess" game board Picture cards Occupational choice description cards: Telephone Lineperson Medical Assistant Secretary Farm Worker Truck Driver Fireperson Baggage Handler House Painter Auto Body Painter Upholsterer (furniture) Air Service Clerk Welder Auto Maintenance Worker Bus Driver

The LCCE Curriculum also offers a suggested IEP (individualized education program) structure for recording a plan for specific educational services for each student. Annual goals can be chosen from the 22 competency areas and other categories. The specific educational services can be developed from the competency units and other sources. The short-term objectives can be selected from the 102 subcompetencies, as well as other sources. Thus, an IEP can be constructed from the LCCE competencies, and competency units can be evaluated at least in part by a Competency Rating Scale (CRS), which was also an outcome of the project.

Thus, the LCCE Curriculum allows educators to establish goals, criteria for success, and a method of recording the necessary individualized plans and the outcomes of those plans. Although these components are designed so they can be used separately, the combination of an IEP, competency unit, and CRS can be considered a complete planning, instructional, and evaluation package. Interested readers should obtain a copy of the LCCE Curriculum/ program guide from CEC to review the competency units for each of the 102 subcompetencies, the IEP format, and the CRS. The publication also contains a list of instructional materials and resources that relate to the competencies. Detailed suggestions on teaching the competencies are presented in Chapters 4-6 of *Career Education for Handicapped Children and Youth* (Brolin & Kokaska, 1979).

IMPLEMENTING THE LCCE CURRICULUM

The LCCE approach attempts to remedy the three difficulties noted earlier by Meyen and White (1980) relative to implementing career education across the country. First, although career education is not and should not be a separate course, it can become a visible programming component by virtue of its three dimensions — the 22 competencies, school-family-community collaboration, and the four distinct stages of career development. Second, career education content can be developmentally sequenced with the competencies and stages, which requires determination of what will be taught, when, and by whom. Third, the Competency Rating Scale (CRS) can give a criterion-referenced base for comparing students on career education concepts and skills (competencies). Although the CRS is a general referent, combining it with other instruments such as the Social and Prevocational Battery and the Brigance makes continuous career education evaluation possible.

Implementing the LCCE approach must begin with several educators who are willing to provide the leadership to make change happen in their school or district. Convincing other educators that change is needed is not easy. Three important areas have to be addressed in order to implement such a comprehensive approach: (a) a series of planning and implementation steps, (b) inservice training to other personnel, and (c) a Career Education Plan for the school or district, involving all possible relevant school, family, and community personnel.

Steps in Planning and Implementation

Several years of developmental work with school systems across the country clearly revealed that any educational innovation is practically impossible to implement without careful planning and extensive involvement and input from many different groups of decision-makers. Our experience identified the following as necessary steps in implementing the career education approach:

1. Enlist the support of school district leadership personnel (e.g., administrators, teacher and community groups).
2. Gain approval from the Board of Education to begin organizing for a career development-oriented curriculum in the district or in pilot schools.
3. Appoint a District-Wide Career Education Steering Committee (and necessary subcommittees) to plan, implement, and manage the curriculum development activities for career education.
4. Review literature and programs on career education to determine a philosophy and model.
5. Develop an acceptable definition/conceptualization of career education so everyone will have a common frame of reference.
6. Develop an acceptable career education model.
7. Conduct needs assessment studies to determine the relative status of the current program, students, and staff.
8. Prepare an inservice training program and identify persons within the school district who are competent to serve as trainers.
9. Develop workshop, student, and program evaluation procedures.
10. Conduct inservice training program.
11. Develop a comprehensive Career Education Plan for implementing the curriculum.
12. Gain approval from the administration and Board of Education to implement the plan.

13. Secure facilities and resources for implementing the plan.
14. Implement the plan in terms of priorities and guidelines.
15. Conduct formative and summative evaluations of the implemented program.
16. Change and modify the Career Education Plan as needed.

Space limitations do not permit a detailed explanation of the above steps. This brief listing, however, gives a general idea of the implementation process. The *Trainer's Guide for Life-Centered Career Education* (Brolin, McKay, & West, 1978) provides detailed information, guidelines, and forms for conducting the above activities.

Inservice Training

The LCCE Model requires the involvement of a wide range of school personnel, family and community representatives. Inservice training should interface as many of these individuals as possible.

The LCCE Inservice Training Program involves a group process approach. A 20-session model was devised on the following topics: orientation to workshop and other participants; use of group process techniques; handicapping conditions; concepts and procedures for appropriate educational programming; career education; instructional strategies; competency units; resources and materials; personal-social skills; daily living and occupational skills; community resources; family involvement; individualized education program; student assessment; career education programming; review of student competency assessment data; instructional goals and responsibilities; instructional goals and resources; community assistance and administrative goals; and future actions and workshop evaluation. The last six sessions involve the participants' developing a Career Education Plan.

Effective inservice training takes considerable time and effort. All school personnel may not be involved or need to be involved in every session. This determination depends upon each school district's unique situation.

The Career Education Plan

A Career Education Plan is important because it is solid evidence that a number of people have provided input and contributed to its development. It is a commitment to change and outlines how, when, where, and by whom career education will be done. It requires the involvement of administrators, teachers, family, and community resources to be truly effective.

The following outline is recommended for writing the plan:

I. School District Philosophy
II. Definition of Conceptualization of Career Education for Handicapped Student
III. Career Education Goals/ Objectives
IV. Instructional Goals/ Objectives
V. Community Involvement Goals/ Objectives
VI. Administrative Goals/ Objectives
VII. Implementation

An example of a Career Education Plan written similarly to the above outline was done by the School District of West Allis-West Milwaukee, Wisconsin. Interested readers may want to contact Dr. Robert J. Buehler, Director/ Supervisor of Special Education, for a copy of their plan.

A FINAL NOTE

The LCCE Curriculum approach offers educators the opportunity to increase their effectiveness with exceptional children. It is not intended to replace most of what is being done now but, rather, to add a more relevant and practical aspect to the students' education — namely, competency education for community living and working. Although much of what is advocated is hopefully being taught already, the LCCE Curriculum organizes it and makes sure that all important competency areas are covered within a K-12+ continuum.

Many school districts throughout the country have implemented LCCE, and at least one state — Washington — has adopted it as their curriculum guide. Examples of LCCE curricula exist in St. Louis, Missouri; Jamestown, New York; Dallas, Texas; Independence, Kansas; Minneapolis, Minnesota; Flat River, Missouri; Racine, Wisconsin; Ames, Iowa; Joliet, Illinois; Las Vegas, Nevada; San Diego, California; Cleveland, Ohio; Bellevue, Washington; and many others. Sheltered workshops and institutional settings have also adopted the LCCE approach. And recently it has been related to postsecondary services through a special federal project of this writer, the Lifelong Career Development (LC Project.

Educators must break away from traditional practices and examine their contributions to the educational

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process. The world in which we live is becoming more complex every year. A primary goal of education is to assist students to become competent. LCCE, with its emphasis on the competencies needed to work and live effectively, can be the point of departure to accomplish this goal. We must help exceptional children become competent by expanding their options through a well organized and humanistic career development process.

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Nixa Answers the Question: "What Is a Basic Education?"

By Villa Ann Glenn

File 1

(News about Successful School Programs in Missouri)

Recent nationwide debate over issues such as mandatory competency testing, student achievement, accountability, "back to basics" and lack of communication between school and home prompted personnel in the Nixa R-II School District (Christian County) to take a hard look at the district's educational program. Their analysis indicated need for:

—A clear-cut definition of "basics" and of educational responsibilities.

—Written goals and objectives which could be measured.

—A built-in, schoolwide evaluation plan.

—Parent involvement.

A Title IV-C grant has helped the district develop plans and activities for achieving those four goals. The project, which began in 1978 and is now in its third year, is entitled "The BEST Demands Responsibility." It provides for curriculum revision, teachers' workshops, special activities to improve student knowledge in basic skill areas, efforts to expand parent involvement, and development of learning activities based on objectives of Missouri's Basic Essential Skills Test (BEST). The project spans kindergarten through eighth grade.

A 14-member curriculum committee, consisting of teachers from all grade levels (K-8), began work for the project with a "face the facts" session, designed to answer a few fundamental questions:

What is a basic education?

Basics were defined as skills that determine how well the student meets the demands of his own culture. Since the culture is in a constant state of change, so must a basic education be. Teachers see a danger that the "back to basics" movement could result in a lowering of educational standards. Therefore, their priority is to design a program that eliminates frustration for the high-risk student and prevents boredom for the more capable one.

Why the BEST?

The objectives of the BEST were chosen for a framework because the skills evaluated by the BEST are those that make education relevant. Teachers feel the BEST has objectives and activities that require proficiency at all grade levels.

What is the school's responsibility?

- *To analyze the total educational program; to revise and coordinate the entire curriculum according stated goals and objectives.*

What is the teacher's responsibility?

- *To learn the most efficient and effective methods of teaching and evaluating basic skills to meet the school's educational goals and instructional objectives.*

What is the home's responsibility?

- *To provide the best possible environment and simulation for the child, so he or she can develop to full potential.*

What is the student's responsibility?

- *To accept the challenge a basic education demands so he or she can cope in a culture that requires certain responsibilities.*

Teachers began revising curricula by analyzing results from several types of tests and from surveys of parents and students. Teachers' opinions were considered, also. Textbooks were evaluated to determine skills that were relevant and essential to help the student meet the demands of today's

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Mrs. Glenn is coordinator of the project, "The BEST Demands Responsibility.

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world. Specialists from the Missouri Department of Elementary and Secondary Education helped define goals and objectives.

Teachers' opinions revealed that much of their work was textbook-oriented and "time-focused"; they felt frustrated with too much irrelevant subject matter and too little time. Lacking specific goals and objectives, teachers felt they were being held accountable without knowing what they were being held accountable for. The Title IV-C project enabled teachers to meet in workshops where they had time to work together to coordinate learning activities and develop instructional units. Teachers' comments indicate this time was invaluable.

Since success or failure in school is largely contingent on the home, encouraging parents to take an active part in their children's education has been an important goal of the project. Parent involvement meetings now are held at the beginning of the school year. They are given records which indicate areas of learning that can be strengthened as well as activities for parents and children to do together.

Parents have indicated their appreciation of the effort the school has made to bridge the gap between home and school: "I am pleased that we, as parents, have an opportunity to help our children achieve specific goals....We enjoyed working with our child....I feel I was better able to help my child by knowing what she was expected to learn....I think the parent involvement program is excellent and will be even better when we become more aware of the advantages of using it."

The title of the project—"The BEST Demands Responsibility"—emphasizes another important goal: teaching civic responsibility to students. Government units emphasize the responsibilities of citizens in a democracy. Lower elementary students are involved in activities that teach democratic values in the home, school and on the playground. Students share, take turns, and work together for the common good. Students become aware of the need for rules and that rules apply to everyone; they are taught to solve social conflicts in an acceptable manner. Beginning concepts of the structure of government are included. Activities include trips to city hall and county offices in the courthouse.

These concepts are extended into the middle school where students are taught to assume responsibility for behavior and to accept consequences for misbehavior. Political science is introduced at the fifth grade level, where it becomes important for the student to learn how governments function. Trips are made to the county court, where students are introduced to law at the county level. History is included, to teach the concept that modern life has roots in the past and consequences in the future. The study of different cultures instructs students in the rights of minorities. Learning is reinforced at the eighth grade level when students go to Jefferson City to see their government in action.

Students also are taught economic responsibility. Students in the lower elementary grades learn that money is a medium of exchange, and the rights and responsibilities of consumers are taught. In the upper grades, basic principles of American free enterprise are taught. Capitalist, communist and socialist ideologies are covered. Students are involved in activities where they develop their own businesses. Diversification, specialization, and supply and demand are considered when students learn that pooling resources and competition make people strive harder.

Students are taught communication skills as part of the new emphasis on basics. In the lower grades, students are encouraged to take part in many oral communication activities. These include storytelling, role playing, and panel discussions. Speech classes also have been developed at the junior high level.

Because of the positive impact of this project, the district applied for another Title IV-C grant to support similar activities at the high school level. This project ("BEST—Implications for the Secondary School") was approved and began during the summer of 1980. This project will enable teachers, administrators and parents to build on the framework of the K-8 project in revising and coordinating the high school curriculum. When this project is complete, educators and parents at Nixa will be confident they have a flexible program with a basic structure that leads to greater student competency in analytical, critical and creative thinking.□

Promoting better understanding of citizenship and civic responsibility are important goals of Nixa's Title IV-C project. The project has helped to define the responsibilities of teachers, parents and students, and it's earned parents' support.

Independent Living Skills Can Be Taught

Ten months after graduating from high school, Chris Falbo moved into Chapel Haven, a community which would help him learn independent living skills. He is a tall, handsome young man with dark brown hair and warm hazel eyes. He doesn't look disabled. However, he is learning disabled, and because of this, he has difficulty learning the ordinary tasks of daily life. He is making progress, but a lot of time, effort and systematic teaching have gone into his progress.

Chapel Haven is an unusual offshoot of the group home movement, one of the few residential programs in the United States that primarily serve learning disabled people. For a number of years, group homes have provided a place to live for young people with many different disabilities. They have used carefully structured approaches to help disabled individuals begin their adult lives and practice the skills they need to become independent.

Learning self-help, step by step

The value of this concept is uniquely demonstrated in the programs for learning disabled people. They teach residents activities of daily living, such as cooking, budgeting, cleaning and shopping. The young people live in furnished apartments with roommates who are learning the same skills. Staff members live in the same building and provide step by step training and twenty-four hour supervision; public transportation is available for travel to work and recreational opportunities.

We recently contacted four programs:

- **Chapel Haven, New Haven, Connecticut**
- **Jewish Special Young Adults (JESPE) House, Orange, New Jersey**
- **Success Through Independent Living Experience (STILE), Asbury Park, New Jersey**
- **Terry's Residence for Young Adults (TRYA) Hostel, Hempstead, New York**

Practice and coaching improve social skills

For many learning disabled young people, the most difficult problem is learning acceptable social behavior. Because of their disability, they frequently do not pick up social cues; this can create problems in fitting into social groups and developing appropriate friendships. However, these social skills can be taught in the same structured way that academics and daily living skills are taught. The staffs of these residences use many approaches to teach conversation, self-control and constructive ways of dealing with conflict.

Socialization groups are used as a means of teaching acceptable ways of entering and leaving conversations and making small talk in social gatherings. Role-playing is used to practice asking a friend out for a movie or discussing the latest football game. Organized social activities encourage residents to use community and cultural resources successfully.

Learning how to handle social situations can be tremendously encouraging to young people who have been rejected because of social awkwardness. One young woman said:

"Here, I've learned how to get along with people, how to make friends. Before I came here, I can't say I had true friends. The director helped me. I had a session with him by myself and we talked about how to start a conversation and how to talk to a person. We rehearsed conversations."

Families are eased through transition

For most families, the process of separation and beginning independence is hard; the transition can be rocky for parents and children alike. The directors of these residences feel that supporting families through the transition is an important challenge. As one explained, "To help with the letting go process, we educate the parents about their child's real abilities. It takes time and support and commitment. It takes time to adjust."

Jobs are key to independence

The most important challenge in being able to live independently is to find a job that will enable a young person to be self-supporting. For a person with a learning disability, a part of that challenge is to make a choice that is appropriate to his or her own strengths. A person who has trouble understanding money concepts should not seek a job as a cashier, for example. Preparing for a job must include the following steps for success:

- Careful evaluation and assessment, geared to developing a full profile of abilities as well as difficulties;
- Training that is in accord with the information developed in evaluation—as well as taking the local job market into account;
- If possible, trying a variety of activities and skills; prevocational and work-study programs can be very effective in suggesting new possibilities;
- Teaching job-related behavior—promptness, reliability, appropriate dress;
- Finding a job appropriate to each person's skills and potential;
- Follow-up by a counselor to make work adjustment go smoothly by helping to solve any problems that arise.

When this process works well, it can be the most liberating event in a young person's life. One young woman who was encouraged and assisted to become a nurse's aide was overjoyed:

"When they (Vocational Rehabilitation) suggested that, she lit up like a Christmas tree. She was really excited, because her older sister is a nurse, and she had never thought she could do a job like her older sister."

She is now working, loving her work, and taking classes to increase her skills.

Learning disabled young people, like the rest of the world, find that working every day loses its novelty. Going to work when it's snowing—or perhaps when your friends are headed for the beach—can be hard for anyone. Counselors help the residents through these adjustments and encourage them to take pride in their work and their paychecks.

(continued on page 4)

Brown, D., and Ormsby, M. Independent living skills can be taught. Closer Look, 1982, Spring, 3-4.

These pioneering programs for learning disabled young adults have helped many graduate into independence and a place of their own. Each program grew out of parents' and professionals' concern for young men and women who graduated from high school with no direction in their lives. The ideas they have used, the techniques they have developed and the innovative use of community resources can be adopted by parent and community groups in other areas. Young people can take those first steps away from home and learn at their own pace to develop their full potential as independent adults. It takes time, planning, persistence, money, and development of community awareness and support to put together a succesful program—but the benefits in human and economic terms are enormous.

Parents can establish needs, design response

How can parents and interested professionals work within their communities to encourage such programs? The first step is to survey their own community: What is happening to young people when they graduate? What is available in the community in terms of vocational training, social services and continuing education geared to the needs of learning disabled people? Are there any ways to reach community leaders who may be able to contribute help of different kinds?

Once the dimensions of the need are established, groups can begin to set goals, establish priorities and determine the best way to design a program that is effective for their own community. The training component of a program may be all that a given community can or will support; other communities may have larger populations or other special circumstances that make a residential program feasible. The important point is to meet the needs of young people who need extra help in achieving independence. Their pride in achieving these successes is expressed by one young man who said:

"What would I have done at home? Just sit around? Watch TV and listen to music? Now I have learned to cook, learned to clean and learned to budget. I have a job."

Modest achievements? Perhaps; but ordinary daily life is made up of such modest achievements. Well-designed programs for independent living can help young people with all kinds of disabilities to lead the fulfilling, independent lives we want for all our children.

— Dale Brown of the President's Committee on Employment of the Handicapped and Marie Ormsby

APPENDIX C

Competency Rating Scale Manual

Competency Rating Scale Manual

COMPETENCY RATING SCALE MANUAL

The life centered approach to career education bases its curriculum on 22 competencies which have been identified as necessary for personal independence in the community and on the job (Brolin, 1974). These 22 competencies have been further delineated into 102 subcompetencies (McIntosh, Tuoti, & Brown, 1975). If this curriculum is to be used, a uniform method of evaluating student performance and progress in career education is needed. Although there are numerous educational and psychological devices and systems in existence for evaluating student performance in a variety of areas, none appears to be sufficiently specific or comprehensive for the criteria which define the 102 subcompetencies. The Competency Rating Scale (CRS) is an initial attempt to meet this need by providing educators with a systematic means of assessing student mastery of the 102 subcompetencies. The purpose of this manual is to furnish the user with a guide for rating student performance for each subcompetency, as well as a comprehensive explanation of each subcompetency.

The CRS is a rating scale which the user completes by judging a student's mastery of the subcompetencies using the criteria presented in Chapter 3 of this manual. Like any assessment device or system, the CRS requires a certain degree of training of the rater before actual use with students. Since the CRS requires judgments regarding student performance and behavior, it is necessary that all raters employ the same criteria when making judgments. This is critical if the user intends to compare students to one another or to evaluate changes in individual performance or behavior over time.

The manual is divided into four sections. Section I describes the rating key and how to rate student performance and behavior. Section II explains the use of the CRS Record Form. Section III presents explanations and behavioral criteria for the subcompetencies. Section IV describes interpretation of CRS results.

The task of assessing student performance in any subject area is a difficult one. This task becomes increasingly difficult for the educator dealing with the career education of handicapped students.

The combined results for 285 students rated for the first CRS field testing in the cooperating schools during 1976-1977 are presented in Table A-1 at the end of the CRS manual. Table A-1 presents mean scores for the 22 competencies, domain totals, and grand totals by grade level (7-12) for all students combined. Figure A-1 graphically represents domain totals and grand totals by grade level for all students. These results are presented for illustrative purposes only since the current version of the CRS incorporates revised criteria for the subcompetencies, as well as a revised rating key. Although Table A-1 cannot be used to directly interpret results obtained from the revised CRS, it can be used to establish rough, preliminary expectancies for student performance.

Further revision of the CRS including validity and reliability studies is anticipated. Such data are not available for the present revision. Persons desiring to use the CRS should be aware that it can only appropriately be used as a research instrument due to the absence of necessary supporting data. Therefore, users should clearly indicate that data resulting from the CRS are experimental and the result of research activities. Such data should not be placed in any permanent student records without such an explanation.

SECTION I—RATING STUDENT PERFORMANCE

The Rating Key

The CRS provides four alternative ratings for student performance on each subcompetency. There are three sources from which the user can draw information to establish the rating for a given subcompetency. The most valid source of information is the rater's immediate personal observation of student performance and behavior. The rater's personal records or notes regarding student performance and behavior are probably less valid, but acceptable. Finally, written or verbal reports from other personnel are the least valid source of information, but they may be necessary.

When sufficient information exists to rate a subcompetency, one of the following ratings should be selected.

0 = *Not Competent.* The student is unable to perform any of the behavioral criteria for the subcompetency. This rating should be used for students who, in the judgment of the rater, cannot be expected to perform this subcompetency satisfactorily for independent living. Such a student will require special help to master the subcompetency or, if not scheduled for further formal education, will require assistance from public or private individuals or agencies to accomplish the behavioral criteria.

1 = *Partially Competent.* The student is able to perform at least one but not all of the behavioral criteria for the subcompetency. This rating should be used for students who, in the judgment of the rater, can be expected to perform this subcompetency satisfactorily for independent living following normal teaching intervention during formal education. Such a student might require assistance from public or private individuals or agencies if he or she is not scheduled for further formal education.

2 = *Competent.* The student is able to perform all the behavioral criteria for the subcompetency. This rating should be used only for those students who, in the judgment of the rater, are able to perform the behavioral criteria satisfactorily for inde-

pendent living without assistance or further formal education.

NR = *Not Rated.* The rater should use this rating for subcompetencies he or she is unable to rate due to absence of sufficient information or other logistical difficulty, e.g., insufficient time.

If at the time that a student is scheduled to discontinue formal education, that student is not capable of independently performing the behavioral criteria for a subcompetency, the rater should determine whether the student could accomplish the subcompetency with assistance from others normally available in the student's environment. This is a *yes* or *no* decision and is further explained in Section II.

The Rater

Optimally, the same individual should rate a student's performance and behavior for all of the subcompetencies. However, logistical difficulties may preclude this. For this reason, the subcompetencies are separated into the three Life Centered Career Education domains: Daily Living Skills, Personal-Social Skills, and Occupational Guidance and Preparation (Section III). The CRS Record Form (Section II) is also separated into these three domains. It is highly desirable that the same individual rate all subcompetencies in a particular domain. If this type of procedure is not possible, one individual should be designated to coordinate the ratings of more than one rater within a domain. If more than one rater is employed, the coordinator should take care to ensure that these raters strictly adhere to the behavioral criteria for the subcompetencies. It is particularly important that ratings be as precise and consistent as possible since CRS results may be used to develop and evaluate individualized education programs.

Rating Intervals

Space is provided on the CRS Record Form (Section II) for seven ratings. It is suggested that the CRS be administered at the beginning of grade 7 and at the end of grades 7, 8, 9, 10, 11, and 12 to establish initial functioning and to monitor changes in performance and behavior. (The CRS could be used at the elementary grade level too, if desired.) If the rater is unfamiliar with a student entering grade 7, rating should be postponed until adequate observation has taken place to ensure accurate ratings. If the CRS is employed after a student has completed any of the intermediate or secondary years, it is recommended that an initial rating be administered followed by yearly ratings. The user is free to administer the CRS as frequently as is deemed advisable. However, caution should be taken not to "teach for the test." In other words, ratings should not take place immediately after the student has been taught a subcompetency, unless the user intends to do further ratings. A single rating following instruction will provide little information regarding long term mastery of the subcompetency.

SECTION II—USING THE CRS RECORD FORM

The CRS Record Form is separated in three sections corresponding to the three domains: Daily Living Skills, Personal-Social Skills, and Occupational Guidance and Preparation. Each part can be administered independently. As noted in Section I of the manual, it is desirable that one individual rate all subcompetencies in a particular domain. This is a matter that each user must determine depending on his or her particular situation. A blank CRS Record Form is presented in Appendix B and may be used as a master for duplication. Figure A-2 at the end of the CRS Manual presents a completed Record Form for a hypothetical student. An initial rating at the beginning of grade 7 and annual ratings at the end of grades 7, 8, 9, 10, 11, and 12 are illustrated.

Identifying Information

The CRS Record Form provides space to record the student's name, date of birth, and sex. Space is also provided for the name and address of the student's school.

Directions

The directions for the CRS Record Form indicate that the user should choose one of the four possible ratings for each subcompetency. The numerical ratings should be recorded in the space to the right of the subcompetency. The NR rating should be assigned to items that are not rated. The subcompetencies are listed on the left side of the CRS Record Form and are grouped under the competencies. Space is provided at the head of each rating column to record the rater's name(s), the student's grade level, and the date(s) of the rating period. If the ratings are completed in a single day, only that date need be recorded. However, if the ratings require more than one day, the user should record both the beginning and ending dates. It is recommended that ratings be completed as quickly as possible (e.g., one day to one week).

A *yes/no* rating is possible in the final column on the right side of the CRS Record Form. This space is provided for the rater to indicate whether a student who is finishing formal education can perform unmastered subcompetencies with the assistance of individuals normally present in his or her environment. This column needs to be completed only for subcompetencies assigned a final rating of 0 or 1. Place a check (✓) in the *yes* or *no* space if needed.

The user will note that Competency 21 in the Occupational Guidance and Preparation Domain has no subcompetencies. Space is provided following Competency 21 to list specific occupational skill training the student

is receiving during the six intermediate and secondary years. The rater should rate this training in the same manner as the other subcompetencies by treating the skill training as a subcompetency. However, only the training during the final year of education is rated, although training received every year should be recorded. Consequently, a numerical rating only for item *f* (training received during the final year of education) should be recorded in the seventh rating column. A similar *yes* or *no* rating can also be determined for this training if it is not complete at the end of the formal education.

Space is provided following the listing of the subcompetencies for the total possible score if a student were assigned the highest rating for each subcompetency in a domain. This value is determined by omitting Competency 21 from the calculations, except for ratings in the last year of formal education. The total possible score can be calculated by counting the number of rated items (N) and multiplying by the highest possible rating (2). Thus, total possible score (TPS) = N × 2. To the right of the total possible score, space is provided to record the student's total actual score (TAS) which is the sum of the ratings for all rated items. Space is provided below the TAS to record the average score per item (AS). The AS is calculated by dividing the TAS by N (thus, AS = TAS ÷ N). Space is provided at the end of the Occupational Guidance and Preparation section for a cumulative total possible score, a cumulative total actual score, and a cumulative average score. The culumative TPS can be calculated by adding the TPS's for the three domains. Note: The TPS and the cumulative TPS must be calculated for *each* administration since the number of rated items may vary with each administration. The cumulative TAS can be calculated by adding the TAS's from the three domains. The cumulative AS can be calculated by adding the AS's from the three domains and dividing by 3. Thus, the user can evaluate performance and behavior for each domain as well as the three domains combined. There is space provided for comments at the end of each Record Form.

SECTION III—BEHAVIORAL CRITERIA FOR RATING SUBCOMPETENCIES

A list of the 102 subcompetencies grouped into the three career education domains follows. Competency 21 consists of 6 subcompetencies which are, in fact, whatever skill training the student is receiving. Each subcompetency is conceptually described and further defined by behavioral criteria. A rank ordering of the criteria for each subcompetency in order of importance for the subcompetency was performed by five national education experts. Further revision of the original criteria considered clarity and specificity. As discussed in Section I, the rater should compare student performance to the behavioral criteria for each subcompetency to determine the degree of mastery. The ratings from the rating key can then be assigned to each subcompetency (item) based on the number of criteria which the student is able to perform for each subcompetency.

DAILY LIVING SKILLS

1. Managing Family Finances

1. *Identify money and make correct change.* The student should be able to use common denominations of currency in daily activities.
   a. Identify various forms of currency by size and denomination.
   b. Count money in coin and bill denominations.
   c. Make correct change from both coins and bills.
2. *Make wise expenditures.* The student should be able to use available information to purchase necessities within his/her income.
   a. Demonstrate the ability to read and use tags and labels in common purchasing.
   b. Categorize purchasable items in regard to quality and quantity.
   c. Identify and differentiate luxury and necessity purchases in the areas of food, clothing, housing, and transportation.
   d. Differentiate between regular and sale items.
3. *Obtain and use bank and credit services.* The student should be able to use common banking services.
   a. Open a checking account.
   b. Open a savings account.
   c. Write checks, make deposits, and record checking transactions.
   d. Make deposits, withdrawals, and record savings transactions.
   e. Identify resources for obtaining loans.
4. *Keep basic financial records.* The student should be able to construct and use a simple budget.
   a. Construct a personal budget (weekly, biweekly, or monthly).
   b. Identify information and items which should be retained.
   c. Record major income and expenses.
   d. Calculate balances of major debts.
5. *Calculate and pay taxes.* The student should be aware of basic yearly taxes and the procedures for their computation and filing.
   a. List taxes normally assessed in the geographical area.
   b. Identify deadlines for payment of common taxes.
   c. Complete tax forms.
   d. Identify sources for assistance with calculation/filing of common taxes.

2. Selecting, Managing, and Maintaining a Home

6. *Select adequate housing.* The student should be aware of his/her housing needs and resources to meet these needs.
   a. Identify personal or family housing requirements, e.g., space, location.
   b. Identify types of housing available in the community.
   c. Identify advantages and disadvantages of different types of housing.

d. Identify procedures for renting a house or apartment.
e. Identify procedures for buying a house.

7. *Maintain a home.* The student should be able to perform routine home cleaning and maintenance.
   a. List routine cleaning and maintenance activities.
   b. Identify the uses of common household cleaning products and equipment, e.g., detergents, vacuum cleaner.
   c. Outline a weekly housekeeping routine.
   d. Use common cleaning products and equipment.
8. *Use basic appliances and tools.* The students should be able to use basic equipment for home maintenance.
   a. Identify common appliances and tools found in the home.
   b. Demonstrate the use of basic appliances and tools.
   c. Demonstrate safety procedures when using appliances and tools.
   d. Perform basic home repairs, e.g., lights, locks, painting.
9. *Maintain home exterior.* The student should be able to perform routine exterior repairs and maintenance.
   a. Identify basic appliances and tools used in exterior maintenance, e.g., ladder, rake, lawnmower.
   b. Demonstrate the use of basic appliances and tools.
   c. Demonstrate safety procedures when using appliances and tools.
   d. Perform common exterior home maintenance and repairs, e.g., grass cutting, painting.

3. Caring for Personal Needs

10. *Dress appropriately.* The student should dress appropriately for work, social, and leisure activities according to weather conditions.
    a. List clothing appropriate for different weather conditions.
    b. List clothing appropriate for different activities.
    c. Select appropriate clothing for a given occasion.
11. *Exhibit proper grooming and hygiene.* The student should be able to care for his/her own personal appearance and hygiene.
    a. Demonstrate the ability to wash individual body parts and use of bathtub/shower.
    b. Demonstrate proper oral hygiene, e.g., brushing, flossing.
    c. Demonstrate proper use of deodorant, hair care products, manicure products, etc.
12. *Demonstrate knowledge of physical fitness, nutrition, and weight control.* The student should be able to combine nutrition and exercise in order to maintain normal fitness and weight.
    a. List ways in which nutrition relates to health.
    b. List ways in which exercise relates to health.
    c. Describe meals balanced for nutritional and caloric content.
    d. Perform common physical exercises, e.g., walking, jogging.
13. *Demonstrate knowledge of common illness prevention and treatment.* The student should recognize common illnesses and health hazards and be aware of resources for treatment.
    a. List major symptoms of common illnesses.
    b. Identify potential hazards found in the home.
    c. List health reasons for cleanliness.
    d. Identify resources for assistance with medical problems.
    e. List common medicines found in the home and their uses.
    f. Demonstrate basic first aid techniques.

4. Raising Children and Enriching Family Living

14. *Prepare for adjustment to marriage.* The student should recognize basic adjustments and responsibilities involved in marriage and aids to those adjustments.
    a. Identify personal adjustments in marriage.
    b. Describe personal responsibilities in marriage.
    c. Describe joint responsibilities in marriage.
    d. List reason for family planning.
    e. List methods of contraception.
15. *Prepare for raising children (physical care).* The student should be aware of basic responsibilities and methods involved with the physical care of children.
    a. List responsibilities involved in child care.
    b. Demonstrate procedures for care of child's physical health.
    c. Demonstrate basic safety measures for protection of children.
    d. Identify symptoms of common childhood illnesses.
    e. List basic stages of child development.
16. *Prepare for raising children (psychological care).* The student should be aware of the basic psychological needs of children.
    a. Recognize the child's relationship to the family.
    b. Identify the child's psychological needs, e.g., love, support, acceptance.
    c. List parental responsibilities involved in the psychological care of the child.
    d. List ways to meet parental responsibilities.
    e. Identify common family problems and ways of dealing with these problems.
17. *Practice family safety in the home.* The student should be aware of common health hazards and precautions.
    a. List potential safety hazards in the home.
    b. Identify appropriate action to take in the event of an emergency.
    c. Demonstrate appropriate first aid for home accidents, e.g., cuts, burns.
    d. Identify potential dangers to children outside the home.

5. Buying and Preparing Food

18. *Demonstrate appropriate eating skills.* The student should be able to employ common table etiquette.
    a. Understand the need for proper manners and eating behavior.
    b. Eat a meal using proper etiquette.
    c. Serve different types of food properly.
    d. Eat a meal at a restaurant or public place.
19. *Plan balanced meals.* The student should be able to plan all basic components of a balanced meal.
    a. Identify the basic food groups required in each meal.
    b. Identify appropriate foods eaten at the three typical daily meals.
    c. Describe the time required to prepare foods from the basic food groups.
    d. Plan a meal within a personal budget.
20. *Purchase food.* The student should be able to shop for and select basic foods within a personal budget.
    a. Construct a shopping list within a budget.
    b. Recognize the cost per unit of basic foods, e.g., quart of milk, dozen eggs, loaf of bread.
    c. Distinguish the quality of perishable foods.

d. Identify different types and cuts of meat, fish, and poultry.
e. Use newspaper ads to take advantage of sales.
f. Locate various food retailer locations.

21. *Prepare meals.* The student should master the basic health, safety, counting and measuring, and recipe reading skills involved in food preparation.
a. Identify food preparation procedures, e.g., washing, peeling, cooking.
b. Follow written instructions to prepare food.
c. State the use of basic appliances and cooking utensils.
d. Define basic liquid and solid measures.
e. Practice kitchen safety procedures.
f. Prepare a complete meal for one or more people.

22. *Clean food preparation areas.* The student should understand the need for cleanliness and basic kitchen cleaning procedures.
a. Maintain personal hygiene in food preparation areas.
b. List reasons for cleaning work area and materials after food preparation.
c. Demonstrate appropriate cleaning procedures.
d. Demonstrate proper waste disposal.

23. *Store food.* The student should be able to store food so that it will not spoil or be damaged.
a. Recognize the need for proper food storage.
b. Identify appropriate food storage techniques for different foods.
c. Identify ways in which food may spoil.
d. Demonstrate appropriate food storage procedures.

6. Buying and Caring for Clothing

24. *Wash clothing.* The student should be able to launder his/her own clothing.
a. Describe common laundry products and equipment and their uses.
b. Demonstrate appropriate laundering procedures for different types of clothing.
c. Use the facilities at a laundromat.

25. *Iron and store clothing.* The student should be able to iron different types of fabrics and articles of clothing as well as store clothing appropriately.
a. Identify proper ironing temperature for common fabrics.
b. Demonstrate proper ironing techniques for basic clothing articles.
c. Demonstrate appropriate safety precautions for using ironing equipment.
d. Identify when, how, and where to store clothing.

26. *Perform simple mending.* The student should be able to repair damaged or worn clothing by hand/machine.
a. Demonstrate basic hand/machine sewing.
b. Demonstrate additional repair techniques, e.g., sewn patches, iron-on patches.
c. Match colors and fabrics.

27. *Purchase clothing.* The student should be able to select and purchase clothing in appropriate sizes for varying situations.
a. List basic articles of clothing. e.g., shirts, slacks, dresses, coats, shoes.
b. Identify personal body measurements.
c. List major clothing categories, e.g., dress, work, casual, sports.
d. Select a wardrobe within a personal budget.

7. Engaging in Civic Activities

28. *Generally understand local laws and government.* The student should have a basic understanding of local laws and governmental structure.
a. List and describe basic categories of local laws, e.g., person, property, traffic.
b. Identify consequences of violating laws.
c. List basic reasons for government and laws.
d. Describe the roles and duties of local officials.

29. *Generally understand federal government.* The student should have a basic understanding of the structure and purpose of federal government.
a. Define the purpose of government.
b. Generally define democracy and representative government.
c. List the three branches of government and their functions.
d. Describe the historical antecedents of the federal government.

30. *Understand citizenship rights and responsibilities.* The student should be aware of basic civil rights and responsibilities.
a. List basic civil rights, e.g., equal opportunity in employment, education, protection by the law.
b. Identify various community services available to citizens, e.g., police protection, public health.
c. List major responsibilities of citizens, e.g., voting, paying taxes, observing laws.

31. *Understand registration and voting procedures.* The student should be aware of basic registration and voting procedures, as well as knowing the basic time deadlines for these procedures as they relate to major elections.
a. Identify voting requirements and procedures.
b. Identify the importance of being an informed voter.
c. List the dates for basic elections and the procedures for registration.
d. Identify sources which inform the voter about election issues.

32. *Understand selective service procedures.* Although there is no longer a general draft, students should be aware of prior selective service procedures and citizen obligations. This knowledge will be particularly important in the future if women are required to participate in any future drafts.
a. Identify who must register for the draft according to current policy.
b. Identify when eligible draftees must register.
c. Locate selective service offices serving a particular geographical area.

33. *Understand civil rights and responsibilities when questioned by the law.* The student should be aware of his/her responsibility to answer inquiries from law enforcement officials as well as being aware of sources for assistance when answering these inquiries.
a. List basic civil rights when being questioned by law enforcement officials, e.g., the right to have legal representation before questioning.
b. Identify resources where one can acquire legal aid.
c. Identify obligations when being questioned by law enforcement officials.
d. Describe the basic court system and its procedures.

8. Utilizing Recreation and Leisure Time

34. *Participate actively in group activities.* The student should be aware of and utilize recreational resources, particularly involving group participation.
    a. Demonstrate competence in basic physical skills.
    b. Identify reasons for participating in group activities.
    c. Demonstrate knowledge of the rules of several activities.
    d. Demonstrate food sportsmanship.
    e. Demonstrate proper care of equipment.
35. *Know activities and available community resources.* The student should be aware of basic public and private recreational resources in the community.
    a. List activities available through both public and private community resources.
    b. Identify activities appropriate to the different seasons of the year.
    c. List the physical and/or financial requirements of common recreational activities.
    d. Participate in recreational activities outside the home.
36. *Understand recreational values.* The student should be aware of the goal of nonwork activities in both physical and mental health.
    a. Differentiate between leisure and work time.
    b. List ways in which recreation affects both physical and mental health, e.g., maintains physical fitness, provides for emotional relaxation.
    c. List personal leisure-time requirements, e.g., the need for physical activity as a result of sedentary employment.
    d. Describe appropriate personal leisure activities.
37. *Use recreational facilities in the community.* The student should demonstrate the ability to make use of commonly available community recreational facilities.
    a. Utilize recreational facilities and equipment in the community.
    b. Arrange transportation to recreational facilities.
38. *Plan and choose activities wisely.* The student should be able to choose and plan leisure activities with regard to personal needs, interests, and finances.
    a. List enjoyable activities.
    b. Differentiate between activities according to cost, time, and location.
    c. Differentiate between activities done individually, small or large groups.
    d. Develop an individual plan of leisure activities.
39. *Plan vacations.* The student should be able to plan the use of extended periods of leisure time.
    a. Identify financial considerations involved in planning a vacation.
    b. List time considerations involved in planning a vacation.
    c. List possible vacation activities.
    d. List resources available for help with making vacation plans.
    e. Describe a proposed vacation plan.

9. Getting around the Community (Mobility)

40. *Demonstrate knowledge of traffic rules and safety practices.* The student should be aware of basic pedestrian and vehicle laws and practices.
    a. List basic pedestrian safety signs and procedures, e.g., crosswalks, pedestrian signals.
    b. Identify reasons for common traffic and safety rules/practices, e.g., safety, orderly movement of machines and people.
    c. Identify vehicle safety signs and procedures.
41. *Demonstrate knowledge and use of various means of transportation.* The student should understand address systems and be able to utilize commonly available transportation.
    a. Demonstrate the ability to utilize local transportation.
    b. Demonstrate the ability to locate street addresses, e.g., differentiate directions and numbering systems.
    c. Identify transportation available in the community.
    d. Identify transportation most appropriate for personal needs.
    e. Interpret city and state and road maps, e.g., directions, symbols, distance.
42. *Drive a car.* The student should prepare for an operator's examination as well as demonstrate knowledge of driving techniques for various situations.
    a. Demonstrate proficiency on the written portion of operator's examination.
    b. Perform all necessary manual operations required to pass operator's examination.
    c. Demonstrate knowledge of driving techniques appropriate for various weather conditions.
    d. Describe appropriate procedures to follow after being involved in an accident.

PERSONAL-SOCIAL SKILLS

10. Achieving Self Awareness

43. *Attain a sense of body.* The student should know how his body looks.
    a. Identify major parts of the body.
    b. List personal physical characteristics.
    c. Describe "typical" physical characteristics and dimensions.
44. *Identify interests and abilities.* The student should know what he likes to do and what he is good at.
    a. List personal abilities.
    b. Identify personal interests.
    c. Demonstrate goal setting in relation to interests and abilities.
    d. List preferences that span a wide range of daily activity.
45. *Identify emotions.* The student should be able to recognize and label his/her feelings and feelings of others.
    a. Identify common emotions, e.g., love, hate, happiness, sadness.
    b. List ways in which one's emotions affect the behavior of self and others.
    c. Differentiate particular emotions in self and others.
    d. Identify ways in which one may cope with different feelings.
46. *Identify needs.* The student should know what his/her physical needs and psychological needs are and how these are met.
    a. List basic physical needs.
    b. List basic psychological needs.
    c. Identify ways to meet the physical needs.
    d. Identify ways to meet the psychological needs.
47. *Understand the physical self.* The student should know the physiological changes in males and females and exhibit an

awareness of sexual facts in preparation for his/her future sex role.

a. Demonstrate knowledge of age-appropriate sexual information.
b. List similarities and differences in male and female bodies.
c. List components of own future sex role.

11. Acquiring Self Confidence

48. *Express feelings of worth.* The student should be able to tell the areas in which he/she is adequate and in which he/she is worthwhile.
    a. List positive physical and psychological attributes.
    b. Express ways in which positive attributes make him/her feel good.
    c. List characteristics necessary to feel good about oneself.
    d. Describe ways in which the action of others affects one's feelings of worth.
49. *Tell how others see him/her.* The student should be able to identify the basic impressions he/she makes on others.
    a. List potential reactions of others to oneself.
    b. Construct a personal view of how others see oneself.
    c. Describe the relationship between own behaviors and others' reactions.
    d. Demonstrate awareness of individual difference in others.
50. *Accept praise.* The student should be able to recognize and accept praise from others.
    a. Identify statements of praise in everyday activities.
    b. List appropriate and inappropriate responses to praise.
    c. Respond to praise statements by others.
    d. List the effects of praise on oneself.
51. *Accept criticism.* The student should be able to accept criticism and/or rejection. It is especially important that the student be able to continue in a situation in the face of criticism or rejection.
    a. Identify critical and/or rejecting types of statements.
    b. List appropriate ways to respond to criticism and/or rejection.
    c. Respond appropriately to critical statements.
    d. List the positive and negative effects of criticism on self.
52. *Develop confidence in self.* The student should be able to focus on the positive characteristics he/she possesses in order to develop self confidence.
    a. Identify positive characteristics of oneself in a variety of areas, e.g., school, work, recreation.
    b. List appropriate ways to express confidence in oneself.
    c. Make positive statements about oneself.
    d. Identify potential reactions of others to expressions of self confidence.

12. Achieving Socially Responsible Behavior

53. *Know character traits needed for acceptance.* The student should be aware of individual characteristics that promote and hinder acceptance.
    a. Identify own acceptable character traits.
    b. Identify acceptable character traits in others.
    c. List character traits necessary for acceptance in various situations.
    d. List different character traits that inhibit acceptance.
54. *Know proper behavior in public places.* The student should be aware of appropriate behavior for common public settings.
    a. Identify reasons for appropriate behavior in public places.
    b. Identify appropriate behavior when using transportation facilities.
    c. Identify appropriate behavior when using eating facilities.
    d. Identify appropriate behavior when using recreational facilities.
55. *Develop respect for the rights and properties of others.* The student should be aware of the rights of private ownership and should know appropriate behavior when dealing with the property of others.
    a. Identify personal and property rights of others, e.g., freedom from physical injury, control of personal property.
    b. Identify reasons for respecting the rights and property of others.
    c. Demonstrate respect for other persons and their property, e.g., talking in turn, appropriate care of borrowed items.
    d. List appropriate situations and procedures for borrowing the property of others.
56. *Recognize authority and follow instructions.* The student should recognize those persons and roles that typically have the right to give instructions and be able to follow minimal instructions.
    a. Identify common authority roles, e.g., teachers, parents, public officials.
    b. Identify reasons for following instructions, e.g., safety, order, convenience.
    c. Respond appropriately to specific instructions from authorities.
    d. Identify situations in which the individual has the right to disregard instructions from authorities, e.g., participation in a physical activity when ill.
57. *Recognize personal roles.* The student should be aware of his roles in common situations, e.g., home, school, work, recreation.
    a. Identify current roles, e.g., child, student, worker.
    b. Identify possible future roles, e.g., spouse, parent, worker.
    c. List roles of significant others, e.g., parents, teachers, employers.
    d. Describe rights and obligations involved in personal roles as they interact with the roles of others, e.g., teacher instructs and makes assignments while students gain knowledge and complete tasks.

13. Maintaining Good Interpersonal Skills

58. *Know how to listen and respond.* The student should know when and how to listen to others, as well as appropriate responses to others in common verbal situations.
    a. Identify proper listening techniques, e.g., look at the speaker, wait for the speaker to finish.
    b. Demonstrate appropriate listening techniques.
    c. Identify positive outcomes of listening appropriately, e.g., gain information, demonstration of respect for others.
    d. Identify negative aspects of listening inappropriately, e.g., others may not speak, or may not be candid when speaking.
59. *Know how to make and maintain friendships.* The student should be aware of the qualities he/she would like to have in

a friend and recognize the rights and responsibilities involved in friendships.
   a. Identify necessary components of a friendship.
   b. List personal considerations in choosing a friend.
   c. List the rights and responsibilities involved in friendships.
   d. List activities that can be shared with friends.

60. *Establish appropriate heterosexual relationships.* The student should be aware of appropriate roles and common procedures for establishing heterosexual relationships.
   a. Identify behavior appropriate to sex role.
   b. Identify qualities of an individual who would be desirable as a dating partner.
   c. Describe appropriate procedures for making a date.
   d. Identify activities that are appropriate for a date.

61. *Know how to establish close relationships.* The student should recognize the characteristics of intimate friendships, including acceptance and responsibilities.
   a. List characteristics of close relationships, e.g., trust, acceptability, openness.
   b. List different types of close relationships, e.g., parent-child, husband-wife, best friends.
   c. Recognize and respond to intimate feelings of others.
   d. Identify persons with whom he/she could establish a close relationship.

14. Achieving Independence

62. *Understand the impact of behavior on others.* The student should understand that his/her daily behavior affects others around him/her.
   a. List ways in which personal behavior affects others around him/her, e.g., disturb work, sleep, provide good or bad examples.
   b. List situations in which appropriate behavior is critical, e.g., job interviews, work, school.
   c. Recognize cues from others that behavior is inappropriate, e.g., criticisms, rejection.
   d. Identify ways in which to correct inappropriate behavior, e.g., ask others for advice, imitate appropriate role models (parents, teachers, close friends).

63. *Understand self organization.* The student should be able to take responsibility for organizing his/her life in terms of tasks and commitments to others in relation to the time available to fulfill these.
   a. Plan daily activities.
   b. Identify areas of responsibility in personal life.
   c. Identify reasons for organizing one's responsibilities/activities.
   d. Describe ways in which personal organization relates to greater independence, e.g., better ability to deal with routine and unexpected responsibilities.

64. *Develop goal seeking behavior.* The student should develop positive attitudes toward reaching personal goals and understand his/her values toward developing future goals.
   a. Define a goal.
   b. List personal goals.
   c. Identify characteristics of realistic goals.
   d. Identify appropriate persons for assistance with setting goals.
   e. Identify potential barriers to goals.

65. *Strive toward self actualization.* The student should develop habits and attitudes necessary for individual growth.
   a. Identify important characteristics for personal growth, e.g., good habits, positive attitudes, perseverance.
   b. List elements necessary for a satisfactory personal life.
   c. Identify sources for continued educational/psychological growth.

15. Achieving Problem Solving Skills

66. *Differentiate bipolar concepts.* The student should be able to differentiate between such concepts as positive and negative as they relate to his/her ideas, plans, values, and decision making skills.
   a. Examine positive and negative aspects of personal ideas/behavior.
   b. Identify reasons why ideas, values, and plans have both potentially positive and negative implications.
   c. Identify situations that require examination of both positive and negative aspects.

67. *Understand the need for goals.* The student should understand the relationship of goals to problem solving behavior.
   a. Identify ways that goals affect one's life.
   b. Set model personal goals.
   c. List outcomes to be considered in goal setting.
   d. List examples of goal attainment.

68. *Look at alternatives.* The student should be able to seek information and examine alternatives in relation to decision making processes.
   a. Define the meaning of alternatives.
   b. List possible alternatives with respect to a personal goal.
   c. Utilize compromises and alternatives.
   d. List ways of seeking and finding information that develops alternatives.

69. *Anticipate consequences.* The student should be able to recognize different outcomes developing from decisions.
   a. Define "consequences" or outcomes.
   b. List ways in which personal behavior produces consequences.
   c. Describe the concept of maximum gain for minimum risk.

70. *Know where to find good advice.* The student should recognize when he/she needs outside advice, as well as be aware of where to find such advice.
   a. Identify situations in which one would need advice.
   b. List available resources for resolving problems.
   c. Describe the procedure for contacting appropriate persons for assistance.
   d. List potential outcomes of seeking advice.

16. Communicating Adequately with Others

71. *Recognize emergency situations.* The student should recognize the sound and meaning of emergency sounds such as sirens and fire alarms, as well as know the appropriate procedures at those times.
   a. Identify sights and sounds of emergency situations.
   b. Identify appropriate authorities to contact in emergency situations.
   c. Describe personal communications indicating emergency situations.
   d. List personal responsibilities in emergency situations, e.g., how to report fires or accidents.

72. *Read at the level needed for future goals.* The student should be able to read at a 2.5 grade level as a minimum and be familiar with procedures for obtaining information from newspapers and directories.

a. Demonstrate the ability to read at a minimum level.
b. Describe common varieties of information available in his/her environment.
c. Read labels and directions.
d. Obtain information from newspapers.
e. Obtain information from telephone directories.

73. *Write at the level needed for future goals.* The student should exhibit writing and spelling skills adequate for social correspondence, job applications, telephone messages.
a. Write informational notes.
b. Complete job applications.
c. Write personal letters.
d. Take telephone messages.

74. *Speak adequately for understanding.* The student should be able to make consonant and vowel sounds properly with adequate inflections and should be able to express his/her thoughts in complete sentences.
a. Participate in social conversations.
b. Demonstrate proficiency in basic language skills.
c. Demonstrate the ability to adjust voice to situations.
d. Demonstrate a variety of verbal expressions.

75. *Understand the subtleties of communication.* The student should be able to recognize commonalities in his/her communications to others and their communications to him/her.
a. Identify the nonverbal elements of communication.
b. Demonstrate verbal and nonverbal elements of communication.
c. Identify verbal expressions that correspond to feelings.
d. Identify verbal expressions that are inconsistent with feelings.

OCCUPATIONAL GUIDANCE AND PREPARATION

17. Knowing and Exploring Occupational Possibilities

76. *Identify the personal values met through work.* The student should understand his/her own personal values and needs satisfied by work.
a. Recognize that work is necessary to obtain economic independence.
b. Identify the role of employment in building personal and social relationships.
c. Identify personal needs that can be met through work.
d. Describe how work relates to one's self esteem.

77. *Identify the societal values met through work.* The student should understand how occupations relate to the needs and functions of society.
a. Identify ways in which individual workers help society, e.g., contribute goods and services, pay taxes.
b. Identify ways in which members of specific occupations contribute to society, e.g., production workers, professionals.
c. Identify ways in which workers on different jobs are interdependent.
d. Describe societal rewards for different occupations, e.g., income, esteem.

78. *Identify the remunerative aspects of work.* The student should understand that there are various forms of compensations for work, e.g., piece rates, salaries, hourly wages, commissions.
a. Identify reasons why people are paid for working, e.g., they are doing a service, they meet a need.
b. Identify reasons why some jobs pay better than others, e.g., more training involved, higher level of skill.
c. Discuss meeting personal needs through wages, e.g., purchasing clothes, food, shelter.
d. Describe the positive and negative aspects of different kinds of wages, e.g., piece rate versus hourly wage.

79. *Understand classification of jobs into different occupational systems.* The student should understand that jobs may be classified in different occupational categories.
a. Identify the major categories of jobs relevant to his/her interests.
b. Identify general job categories, e.g., white versus blue collar, service versus production, skilled versus unskilled.
c. Describe training requirements and wages relating to common job classifications.

80. *Identify occupational opportunities available locally.* The student should be aware of employment opportunities in his/her own community. He/she should also be aware that opportunities vary in different localities.
a. List sources of information about employment opportunities.
b. Locate sources of information about employment opportunities.
c. Utilize the sources of information about employment opportunities, e.g., read want ads, meet with placement specialists.
d. Describe differences and employment opportunities in varying localities, e.g., rural versus urban, small versus large cities.

81. *Identify sources of occupational information.* The student should be familiar with persons/agencies, as well as directories providing information about occupations.
a. Identify sources of occupational information, e.g., *Occupational Outlook Handbook*, guidance counselor, employment service.
b. Identify the kinds of information provided by each source.
c. Utilize occupational information sources to obtain information specific to a particular job.

18. Selecting and Planning Occupational Choice

82. *Identify major occupational needs.* The student should be aware of his/her personal needs which can be met through employment.
a. Identify the criteria he/she would use in selecting an occupation, e.g., salary, type of environment, type of responsibilities.
b. Relate his/her needs to a specific occupational environment, e.g., outdoors versus indoors, factory versus community.
c. Relate his/her needs to a specific job, e.g., directing others, working alone, having specific responsibilities.
d. Identify personal/social needs met through work, e.g., acceptance, approval, friendship.
e. Identify status needs met through work, e.g., standard of living, respect.

83. *Identify major occupational interests.* The student should be aware of his/her personal preferences regarding the different occupational groups.
a. Identify one or more occupations he/she is interested in pursuing.
b. Describe the characteristics of that occupation or occupations that enable him/her to pursue interests.

c. Describe ways that an occupation relates to future goals.

84. *Identify occupational aptitudes.* The student should be aware of his/her own strengths and weaknesses as they relate specifically to his/her future in the world of work.
   a. Identify different aptitudes necessary in the performance of various jobs, e.g., speed, accuracy, manual dexterity, reading ability.
   b. Identify personal aptitudes, e.g., speed, accuracy, fine motor coordination, eye-hand coordination.
   c. Identify activities which can improve aptitudes necessary for a personally preferred job.
   d. Practice remedial activities.
85. *Identify requirements of appropriate and available jobs.* The student should be able to understand and identify prerequisite skills and training necessary for available jobs.
   a. List the requirements for jobs of interest.
   b. Determine the extent to which personal qualifications are commensurate with requirements of jobs of interest.
   c. Identify alternatives for occupations for which personal qualifications are not commensurate with identified requirements.
86. *Make realistic occupational choices.* The student should be able to integrate his/her knowledge of occupations, specific jobs, and his/her own assets in a systematic manner to select an appropriate occupation.
   a. Identify one or more jobs of interest.
   b. Obtain specific written information about the above jobs, e.g., qualifications, salary, age.
   c. Obtain observational information about the above jobs through participation, e.g., on site visits, work samples, job tryouts.
   d. Determine whether identified jobs are commensurate with interests, abilities, and physical and psychological needs.

19. Exhibiting Appropriate Work Habits and Behaviors

87. *Follow directions.* The student should be able to successfully implement instructions and complete a task as directed.
   a. Perform a series of tasks in response to verbal instructions.
   b. Perform a series of tasks in response to written instructions.
88. *Work with others.* The student should understand the need for cooperation and be able to work cooperatively with others to achieve a common goal.
   a. Identify reasons for working with others, e.g., efficiency, need for more than one person to complete a particular task.
   b. Recognize the importance of individual components in a cooperative effort.
   c. Complete a task working with other persons.
89. *Work at a satisfactory rate.* The student should be able to work fast enough to maintain competitive standards.
   a. Perform at satisfactory rates on specific jobs.
   b. Identify satisfactory rates required for specific jobs.
   c. List reasons that a job must be performed at a certain rate of speed, e.g., production, quotas, deadlines.
90. *Accept supervision.* The student should be aware of the responsibilities of supervisors and should be able to modify his/her work behavior in response to supervisory directives.
   a. Complete a job following supervisory instructions.
   b. List the roles and responsibilities of supervisors.
   c. Identify appropriate responses to supervisory instructions.
91. *Recognize the importance of attendance and punctuality.* The student should learn the importance of being on time, maintaining regular attendance on the job.
   a. Identify reasons for good attendance and punctuality, e.g., responsibility to employer, production quotas and deadlines.
   b. Identify legitimate versus illegitimate reasons for tardiness and absenteeism, e.g., illness versus oversleeping.
   c. Identify appropriate actions to take if late or absent from job.
92. *Meet demands for quality work.* The student should be able to understand and meet an acceptable standard of work.
   a. Identify minimum quality standards for various jobs.
   b. Identify reasons for quality standards, e.g., protect the consumer, function of the product.
   c. Perform simulated work tasks at at least minimum quality standards.
93. *Demonstrate occupational safety.* The student should recognize basic safety precautions for different types of jobs and practice these precautions.
   a. Identify potential safety hazards on the job, e.g., slippery floors, cluttered stairways, toxic chemicals, moving machinery.
   b. Follow safety instructions on the job, e.g., wear rubber gloves, protective goggles.
   c. Identify major reasons for practicing safety on the job, e.g., protection of self and others, maintaining production standards.

20. Physical/Manual Skills

94. *Demonstrate satisfactory balance and coordination.* The student should be able to use his hands and arms in a coordinated fashion as well as maintaining body equilibrium while walking or climbing.
   a. Demonstrate satisfactory balance and coordination on simulated work tasks.
   b. Demonstrate satisfactory balance and coordination on nonwork tasks, e.g., sports, recreation.
   c. Identify the relationship of balance and coordination to job performance.
   d. Identify jobs which are realistic in terms of one's own physical capabilities.
   e. Practice improvement in balance and coordination.
95. *Demonstrate satisfactory manual dexterity.* The student should be able to use hands and fingers at a level commensurate with his/her occupational interests.
   a. Determine personal level of dexterity in both work and nonwork tasks.
   b. Identify occupations commensurate with determined dexterity.
   c. Identify reasons for dexterity, e.g., appropriate use of tools and equipment.
   d. Demonstrate adequate dexterity on work tasks appropriate to an identified occupation.
96. *Demonstrate satisfactory stamina and endurance.* The student should be able to work for a full 8 hours without tiring excessively.
   a. Perform satisfactorily for a predetermined simulated work task.
   b. Identify jobs where endurance is critical, e.g., construction work, assembly line.

c. Identify the need for stamina on the job, e.g., to produce expected quotas.

97. *Demonstrate satisfactory sensory discrimination.* The student should possess adequate sensory discrimination for an identified occupation.
   a. Demonstrate size and shape discrimination.
   b. Demonstrate color discrimination, e.g., Dvorine Color Vision Test.
   c. Identify the need for sensory discrimination on an identified job.
   d. Demonstrate auditory discrimination.

21. Obtaining a Specific Occupational Skill

No subcompetencies are specified under this competency because they would have to be unique to be particular skill being acquired. Specific skill training being provided the student should be noted on the CRS record form, for example: on the job training, work-study programs, apprenticeship programs, and public school occupational training programs.

a. _____
b. _____
c. _____
d. _____
e. _____
f. _____

22. Seeking, Securing, and Maintaining Employment

98. *Search for a job.* The student should be able to utilize employment resources and follow through on job leads.
   a. Identify the steps involved in searching for a job.
   b. Identify a potential job through employment resources, e.g., employment service, newspaper.
   c. Arrange a real or simulated job interview.

99. *Apply for a job.* The student should be aware of appropriate job application procedures and practice these procedures.
   a. Identify appropriate job application procedures.
   b. Collect personal data to be utilized for a job application.
   c. Complete a real or simulated job application.
   d. Apply for a real or simulated job, both in person and by telephone.

100. *Interview for a job.* The student should be able to recognize and implement the common job interview practices.
   a. Obtain an interview.
   b. Identify appropriate interview behaviors, e.g., dress appropriately, arrive punctually, sit and speak appropriately.
   c. Complete a real or simulated job interview.
   d. Obtain transportation to and from the interview.

101. *Adjust to competitive standards.* The student should recognize his/her own limitations with regard to the requirements of a specific job and should know how to remediate his abilities.
   a. Determine the level of personal abilities regarding an identified occupation.
   b. Determine the minimum level of skill and performance required on an identified occupation.
   c. Identify potential remedial activities which might be required by a specific occupation.

102. *Maintain postschool occupational adjustment.* The student should know how to obtain further training to facilitate promotions or occupational change.
   a. Identify potential problems to be encountered from the job.
   b. Identify potential methods for dealing with these identified problems.
   c. Identify resources for assistance if problems cannot be personally resolved.

SECTION IV—INTERPRETATION

The Competency Rating Scale presented in this manual is the first revision of the original CRS. The CRS remains an experimental instrument for field testing only. However, as indicated in the beginning of the manual, the data in Table A-1 provide preliminary guidelines for establishing expected student performance. These data should not be used directly for interpretation, since they were generated from unmodified criteria and a different rating key. Although it would be ultimately desirable for each student to achieve 100% mastery, it is difficult to predict whether this goal can be attained in any present educational setting. Each user will be faced with determining whether complete mastery of a specified percentage of the subcompetencies is preferable to a partial mastery of all the subcompetencies. At this time, the suggested method in interpretation involves the user's identification of student strengths and weaknesses. Such identification should prove useful for developing individualized education programs (IEP's), as well as evaluating IEP outcomes. Since the CRS items are actually the subcompetencies of the Life Centered Curriculum, low rated items can be used to establish short term objectives for individualized planning. Readministration of the CRS can then be used to evaluate the effectiveness of such planning by comparing pre- and postintervention ratings.

The CRS user can review student performance and behavior for any given rating period to determine deficient areas. Such a determination can assist both in general curriculum planning and in individualized planning. If a large percentage of students are deficient in particular areas (subcompetencies, competencies, or domains), emphasis on these areas could be incorporated into general curriculum planning. Individual weaknesses can be remedied through revised IEP's. The user should be aware that the rating key allows only three numerical ratings. The operational definition of the 1 rating ("at least one, but not all") makes student progress on a subcompetency possible without a change in numerical rating. A student might require several years to progress from a rating of 1 on an individual subcompetency to a rating of 2. Therefore, in the IEP evaluation, the user should look for short term gains in the larger categories (competencies or domains). The present system will reflect short term gains when used in this manner.

The CRS user can review student performance and behavior over several rating periods to determine progress as well as establishing realistic expectancies for typical student growth and development. This interpretation not

only provides the user with suggestions for immediate curriculum planning on a general and individual basis, but also provides suggestions for long range curriculum sequencing. This type of data should prove particularly useful after systematic analysis, since there is little information available to predict typical developmental stages in the career education of these students.

Although the identified subcompetencies, competencies, and domains are felt to be generally comprehensive, there is no evidence at present that these divisions and their sequencing correlate strongly with student ability to master these objectives at any particular age or developmental stage. Thus, the CRS user has an opportunity to either formally or informally establish expectancies and sequencing in each particular setting. In summary, the CRS user can employ results to:

- Determine individual student strengths and weaknesses.
- Develop and evaluate IEP's for individual students.
- Determine group strengths and weaknesses.
- Plan immediate curriculum for groups of students.
- Monitor individual and group progress.
- Establish empirically derived expectancies for individuals and groups.
- Establish empirically derived developmental stages for these students in career education.
- Develop curriculum sequencing and modification to relate to expectancies and developmental stages.

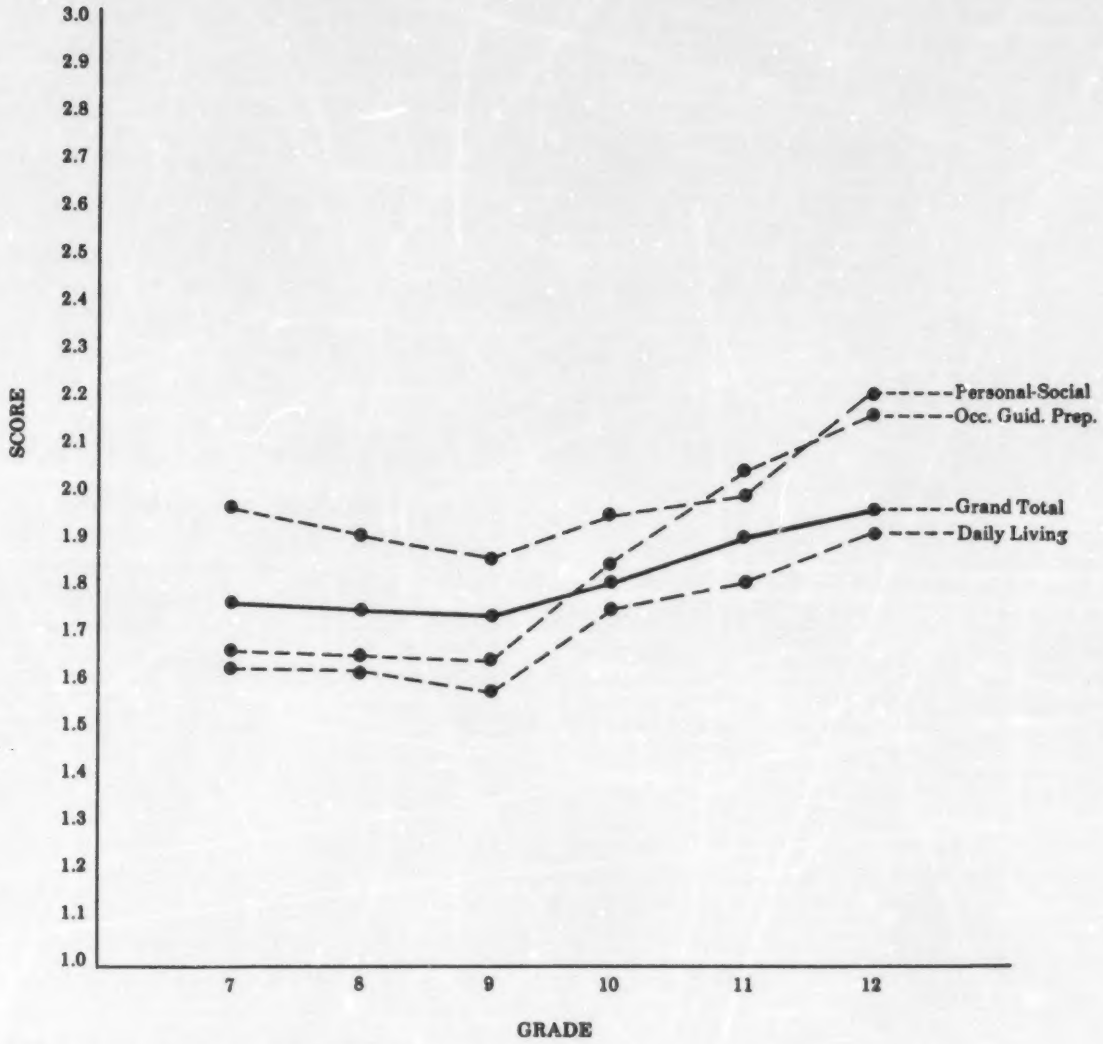
TABLE A-1

Mean Competency Rating Scale Scores[1] For All Schools Combined[2]

Domain Competency	*Grade 7* $N = 51$	*Grade 8* $N = 49$	*Grade 9* $N = 49$	*Grade 10* $N = 58$	*Grade 11* $N = 36$	*Grade 12* $N = 42$
1-1	1.50	1.50	1.51	1.57	1.72	1.81
1-2	1.49	1.62	1.51	1.70	1.85	1.91
1-3	2.01	2.22	2.09	2.12	2.18	2.37
1-4	1.38	1.31	1.41	1.54	1.62	1.76
1-5	1.82	1.93	1.77	2.00	2.06	2.25
1-6	1.67	1.64	1.60	1.86	1.96	1.94
1-7	1.31	1.29	1.24	1.36	1.46	1.86
1-8	1.72	1.55	1.56	1.76	1.71	1.74
1-9	1.78	1.61	1.61	1.83	2.04	2.08
Total	1.63	1.63	1.59	1.75	1.84	1.97
2-10	2.08	1.92	2.00	1.92	2.08	2.25
2-11	2.09	1.94	1.88	1.91	1.94	2.22
2-12	2.12	2.07	2.06	2.14	2.16	2.41
2-13	1.92	1.86	1.80	2.02	2.07	2.34
2-14	1.80	1.66	1.65	1.82	1.80	1.97
2-15	1.72	1.71	1.68	1.64	1.77	1.82
2-16	1.98	2.04	1.88	2.06	2.14	2.20
Total	1.96	1.88	1.82	1.93	1.99	2.17
3-17	1.61	1.50	1.67	1.74	1.94	2.08
3-18	1.30	1.18	1.19	1.48	1.82	1.92
3-19	2.01	2.03	1.97	2.13	2.20	2.36
3-20	2.28	2.17	2.23	2.34	2.47	2.42
3-22	1.12	1.24	1.22	1.54	1.80	1.90
Total	1.66	1.62	1.66	1.85	2.05	2.14
Grand Total	1.75	1.71	1.69	1.84	1.96	2.09

[1]Based on 1, 2, 3 ratings, 3 being the highest rating.
[2]N = 285.

FIGURE A-1
Mean Competency Rating Scale Scores[1]
For All Schools Combined.[2]



[1]Based on 1, 2, 3 ratings, 3 being the highest rating.
[2]*N* = 285.

FIGURE A-2
LIFE CENTERED CAREER EDUCATION
Competency Rating Scale
Record Form
Experimental[1]

DAILY LIVING SKILLS

Student Name_____ Date of Birth_____ Sex _____

School_____ City_____ State _____

Directions: Please rate the student according to his/her mastery of *each* item using the rating key below. Indicate the ratings in the column below the date for the rating period. Use the NR rating for items which cannot be rated. For subcompetencies rated 0 or 1 at the time of the final rating, place a check (✓) in the appropriate space in the *yes/no* column to indicate his/her ability to perform the subcompetency with assistance from the community. Please refer to the CRS manual for explanation of the rating key, description of the behavioral criteria for each subcompetency, and explanation of the *yes/no* column.

Rating Key: 0 = Not Competent 1 = Partially Competent 2 = Competent NR = Not Rated

To what extent has the student mastered the following subcompetencies:

Subcompetencies	*Rater(s)*	MM	MM	MM	MM	MM	MM	MM		
	Grade Level	7	7	8	9	10	11	12		
	Date(s)	9/1/77	5/1/78	5/1/79	5/1/80	5/1/81	5/1/82	5/1/83	*Yes*	*No*
1. Managing Family Finances										
1. Identify money and make correct change		1	1	2	2	2	2	2	__	__
2. Make wise expenditures		1	1	1	1	2	2	2	__	__
3. Obtain and use bank and credit services		0	0	1	1	1	2	2	__	__
4. Keep basic financial records		0	0	0	1	1	2	2	__	__
5. Calculate and pay taxes		0	0	0	0	1	1	1	x	__
2. Selecting, Managing, and Maintaining a Home										
6. Select adequate housing		1	1	1	1	1	2	2	__	__
7. Maintain a home		1	1	1	1	2	2	2	__	__
8. Use basic appliances and tools		1	1	1	2	2	2	2	__	__
9. Maintain home exterior		0	1	1	1	1	1	1	x	__
3. Caring for Personal Needs										
10. Dress appropriately		1	2	2	2	2	2	2	__	__
11. Exhibit proper grooming and hygiene		1	2	2	2	2	2	2	__	__
12. Demonstrate knowledge of physical fitness, nutrition and weight control		0	1	1	1	1	1	1	x	__
13. Demonstrate knowledge of common illness prevention and treatment		0	1	1	1	1	1	1	x	__
4. Raising Children and Enriching Family Living										
14. Prepare for adjustment to marriage		0	0	0	1	1	1	1	__	x
15. Prepare for raising children (physical care)		1	1	1	1	1	1	1	x	__
16. Prepare for raising children (psychological care)		0	0	0	0	1	1	1	__	x
17. Practice family safety in the home		0	1	1	1	1	1	1	x	__

[1]The CRS is a research instrument developed at the University of Missouri-Columbia Data resulting from the use of the CRS should be clearly labeled experimental and should be interpreted with appropriate caution. Direct inquiries to: Donn E. Brolin, 16c Hill Hall, University of Missouri, Columbia MO 65201.

FIGURE A-2 (continued)

Subcompetencies	*Rater(s)*	MM	MM	MM	MM	MM	MM	MM		
	Grade Level	7	7	8	9	10	11	12		
	Date(s)	9/1 77	5/1/ 78	5/1/ 79	5/1/ 80	5/1/ 81	5/1/ 82	5/1/ 83		
5. Buying and Preparing Food									*Yes*	*No*
18. Demonstrate appropriate eating skills		1	1	2	2	2	2	2	__	__
19. Plan balanced meals		0	0	1	1	1	2	2	__	__
20. Purchase food		1	1	1	1	1	2	2	__	__
21. Prepare meals		1	1	1	2	2	2	2	__	__
22. Clean food preparation areas		1	1	2	2	2	2	2	__	__
23. Store food		1	1	1	2	2	2	2	__	__
6. Buying and Caring for Clothing										
24. Wash clothing		1	2	2	2	2	2	2	__	__
25. Iron and store clothing		1	2	2	2	2	2	2	__	__
26. Perform simple mending		1	1	1	1	1	2	2	__	__
27. Purchase clothing		1	1	1	1	1	2	2	__	__
7. Engaging in Civic Activities										
28. Generally understand local laws and government		0	1	1	1	2	2	2	__	__
29. Generally understand federal government		0	1	1	1	1	2	2	__	__
30. Understand citizenship rights and responsibilities		0	1	1	1	2	2	2	__	__
31. Understand registration and voting procedures		0	1	1	1	1	2	2	__	__
32. Understand selective service procedures		0	1	1	1	2	2	2	__	__
33. Understand civil rights and responsibilities when questioned by the law		0	1	1	1	1	1	2	__	__
8. Utilizing Recreation and Leisure										
34. Participate actively in group activities		1	1	2	2	2	2	2	__	__
35. Know activities and available community resources		0	1	1	2	2	2	2	__	__
36. Understand recreational values		0	1	1	1	2	2	2	__	__
37. Use recreational facilities in the community		0	1	1	1	2	2	2	__	__
38. Plan and choose activities wisely		1	1	1	2	2	2	2	__	__
39. Plan vacations		0	0	1	1	1	1	1	x	__
9. Getting around the Community (Mobility)										
40. Demonstrate knowledge of traffic rules and safety practices		1	1	1	1	2	2	2	__	__
41. Demonstrate knowledge and use of various means of transportation		0	1	1	2	2	2	2	__	__
42. Drive a car		0	0	0	0	1	1	1	x	__
*Total Possible Score (TPS) = N × 2 84, 84, 84, 84, 84, 84, 84	*Total actual Score (TAS)	20	38	45	53	64	73	74		
	*Average Score (AS) = TAS/N	.48	.90	1.07	1.26	1.52	1.74	1.76		

Comments: _____

*Refer to the CRS manual for calculation and interpretation.

FIGURE A-2 (continued)

LIFE CENTERED CAREER EDUCATION

Competency Rating Scale

Record Form

Experimental[1]

PERSONAL-SOCIAL SKILLS

Student Name_____ Date of Birth_____ Sex _____

School_____ City_____ State _____

Directions: Please rate the student according to his/her mastery of *each* item using the rating key below. Indicate the ratings in the column below the date for the rating period. Use the NR rating for items which cannot be rated. For subcompetencies rated 0 or 1 at the time of the final rating, place a check (✓) in the appropriate space in the *yes/no* column to indicate his/her ability to perform the subcompetency with assistance from the community. Please refer to the CRS manual for explanation of the rating key, description of the behavioral criteria for each subcompetency, and explanation of the *yes/no* column.

Rating Key: 0 = Not Competent 1 = Partially Competent 2 = Competent NR = Not Rated

To what extent has the student mastered the following subcompetencies:

Subcompetencies	*Rater(s)*	MM	MM	MM	MM	MM	MM		
	Grade Level	7	7	8	9	10	11	12	
	Date(s)	9/1/77	5/1/78	5/1/79	5/1/80	5/1/81	5/1/82	5/1/83	
								Yes	*No*
10. Achieving Self Awareness									
43. Attain a sense of body		1	1	2	2	2	2	2	__ __
44. Identify interests and abilities		1	1	1	1	1	2	2	__ __
45. Identify emotions		1	1	1	2	2	2	2	__ __
46. Identify needs		1	1	1	2	2	2	2	__ __
47. Understand physical self		1	1	1	1	2	2	2	__ __
11. Acquiring Self Confidence									
48. Express feelings of worth		1	1	1	1	1	1	1	X __
49. Tell how others see him/her		1	1	1	1	1	2	2	__ __
50. Accept praise		1	1	2	2	2	2	2	__ __
51. Accept criticism		1	1	2	2	2	2	2	__ __
52. Develop confidence in self		1	1	1	2	2	2	2	__ __
12. Achieving Socially Responsible Behavior									
53. Know character traits needed for acceptance		1	1	1	2	2	2	2	__ __
54. Know proper behavior in public		1	1	2	2	2	2	2	__ __
55. Develop respect for the rights and properties of others		1	1	2	2	2	2	2	__ __
56. Recognize authority and follow instructions		1	1	1	2	2	2	2	__ __
57. Recognize personal roles		1	1	1	2	2	2	2	__ __

[1]The CRS is a research instrument developed at the University of Missouri-Columbia. Data resulting from the use of the CRS should be clearly labeled experimental and should be interpreted with appropriate caution. Direct inquiries to: Donn E. Brolin, 16C Hill Hall, University of Missouri, Columbia, MO 65201.

FIGURE A-2 (continued)

Subcompetencies	*Rater(s)*	MM	MM	MM	MM	MM	MM	MM		
	Grade Level	7	7	8	9	10	11	12		
	Date(s)	9/1/77	5/1/78	5/1/79	5/1/80	5/1/81	5/1/82	5/1/83		
13. Maintaining Good Interpersonal Relationships										
58. Know how to listen and respond		1	1	1	2	2	2	2	__	__
59. Know how to make and maintain friendships		1	1	1	2	2	2	2	__	__
60. Establish appropriate heterosexual relationships		0	1	1	1	1	1	1	x	__
61. Know how to establish close relationships		0	0	1	1	1	1	1	x	__
14. Achieving Independence										
62. Understand the impact of behavior on others		1	1	1	2	2	2	2	__	__
63. Understand self organization		1	1	1	1	1	1	1	x	__
64. Develop goal seeking behavior		1	1	1	1	1	2	2	__	__
65. Strive toward self actualization		1	1	1	1	1	1	1	x	__
15. Achieving Problem Solving Skills										
66. Differentiate bipolar concepts		1	1	1	2	2	2	2	__	__
67. Understand the need for goals		1	1	2	2	2	2	2	__	__
68. Look at alternatives		1	1	1	2	2	2	2	__	__
69. Anticipate consequences		1	1	1	1	2	2	2	__	__
70. Know where to find good advice		1	1	1	1	2	2	2	__	__
16. Communicating Adequately with others										
71. Recognize emergency situations		1	2	2	2	2	2	2	__	__
72. Read at the level needed for future goals		1	1	1	1	1	2	2	__	__
73. Write at the level needed for future goals		1	1	1	1	1	1	1	X	__
74. Speak adequately for understanding		2	2	2	2	2	2	2	__	__
75. Understand the subtleties of communication		1	1	1	2	2	2	2	__	__
*Total Possible Score (TPS) = N × 2 66, 66, 66, 66, 66, 66, 66	*Total Actual Score (TAS)	32	33	41	54	56	60	60		
	*Average Score (AS) × TAS/N	.97	1.0	1.24	1.64	1.69	1.82	1.82		

Comments: _____

*Refer to the CRS manual for calculation and interpretation.

FIGURE A-2 (continued)
LIFE CENTERED CAREER EDUCATION
Competency Rating Scale
Record Form
Experimental[1]

OCCUPATIONAL GUIDANCE AND PREPARATION

Student Name_____ Date of Birth_____ Sex _____

School_____ City_____ State _____

Directions: Please rate the student according to his/her mastery of *each* item using the rating key below. Indicate the ratings in the column below the date for the rating period. Use the NR rating for items which cannot be rated. For subcompetencies rated 0 or 1 at the time of the final rating, place a check (✓) in the appropriate space in the *yes/no* column to indicate his/her ability to perform the subcompetency with assistance from the community. Please refer to the CRS manual for explanation of the rating key, description of the behavioral criteria for each subcompetency, and explanation of the *yes/no* column.

Rating Key: 0 = Not Competent 1 = Partially Competent 2 = Competent NR = Not Rated

To what extent has the student mastered the following subcompetencies:

Subcompetencies	*Rater(s)*	MM	MM	MM	MM	MM	MM		
	Grade Level	7	7	8	9	10	11	12	
	Date(s)	9/1/77	5/1/78	5/1/79	5/1/80	5/1/81	5/1/82	5/1/83	
								Yes	*No*
17. Knowing and Exploring Occupational Possibilities									
76. Identify the personal values met through work		0	1	1	1	1	2	2	—	—
77. Identify the societal values met through work		0	1	1	2	2	2	2	—	—
78. Identify the remunerative aspects of work		1	1	2	2	2	2	2	—	—
79. Understand the classification of jobs into different occupational systems		0	0	1	1	1	1	1	x	
80. Identify occupational opportunities available locally		0	0	1	1	2	2	2	—	—
81. Identify sources of occupational information		0	0	1	1	1	2	2	—	—
18. Selecting and Planning Occupational Choices									
82. Identify major occupational needs		0	0	1	2	2	2	2	—	—
83. Identify major occupational interests		0	1	1	2	2	2	2	—	—
84. Identify occupational aptitudes		NR	0	1	1	1	2	2	—	—
85. Identify requirements of appropriate and available jobs		NR	0	1	1	1	1	2	—	—
86. Make realistic occupational choices		NR	0	0	1	1	1	1	x	—
19. Exhibiting Appropriate Work Habits and Behaviors									
87. Follow directions		1	1	1	2	2	2	2	—	—
88. Work with others		1	1	1	2	2	2	2	—	—
89. Work at a satisfactory rate		1	1	1	1	2	2	2	—	—
90. Accept supervision		1	1	2	2	2	2	2	—	—
91. Recognize the importance of attendance and punctuality		0	1	2	2	2	2	2	—	—
92. Meet demands of quality work		1	1	1	1	1	1	1	x	—
93. Demonstrate occupational safety		1	1	1	1	2	2	2	—	—

[1]The CRS is a research instrument developed at the University of Missouri-Columbia. Data resulting from the use of the CRS should be clearly labeled experimental and should be interpreted with appropriate caution. Direct inquiries to: Donn E. Brolin, 16C Hill Hall, University of Missouri, Columbia, MO 65201.

FIGURE A-2 (continued)

Subcompetencies	*Rater(s)*	MM	MM	MM	MM	MM	MM			
	Grade Level	7	7	8	9	10	11	12		
	Date(s)	9/1/77	5/1/78	5/1/79	5/1/80	5/1/81	5/1/82	5/1/83	*Yes*	*No*
20. Physical-Manual Skills										
94. Demonstrate satisfactory balance and coordination		1	1	2	2	2	2	2		
95. Demonstrate satisfactory manual dexterity		1	1	1	2	2	2	2		
96. Demonstrate satisfactory stamina and endurance		1	1	1	1	2	2	2		
97. Demonstrate satisfactory sensory discrimination		1	1	1	1	1	1	1	x	
21. Obtaining a Specific Occupational Skills										
a. _____										
b. _____										
c. _____										
d. _____										
e. _____										
f. _____								1*	x	
22. Seeking, Securing, and Maintaining Employment										
98. Search for a job		NR	0	1	1	1	2	2		
99. Apply for a job		NR	0	1	1	1	1	2		
100. Interview for a job		NR	0	0	1	1	1	2		
101. Adjust to competitive standards		NR	0	0	1	1	1	1	x	
102. Maintain postschool occupational adjustment		NR	0	0	1	1	1	1	x	
*Total Possible Score (TPS) = N × 2 38, 54, 54, 54, 54, 54, 56	*Total Actual Score (TAS)	11	15	27	37	41	45	49		
	*Average Score (AS) × TAS/N	.58	.56	1.0	1.37	1.52	1.67	1.75		
*Cumulative TPS 188, 204, 204, 204, 204, 204, 206	*Cumulative TAS	63	86	113	144	161	178	183		
	*Cumulative AS	.68	.82	1.1	1.42	1.86	1.76	1.78		

Comments: Requires postsecondary vocational education to complete automatic transmission repair training.

*Refer to the CRS manual for calculation and interpretation.

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